

# MANUFACTURERS' RECORD

A Weekly Southern Industrial and Hardware Newspaper.

VOL. XI. No. 15.  
WEEKLY.

BALTIMORE, MAY 21, 1887.

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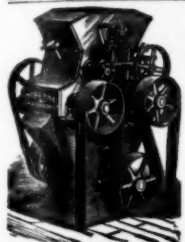
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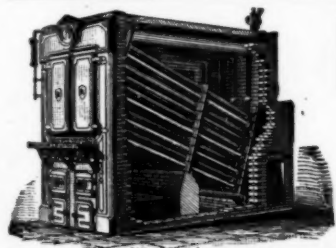
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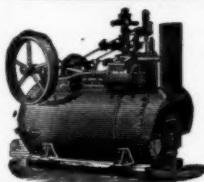
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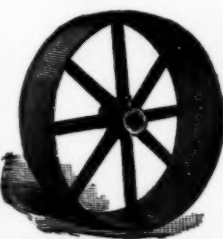
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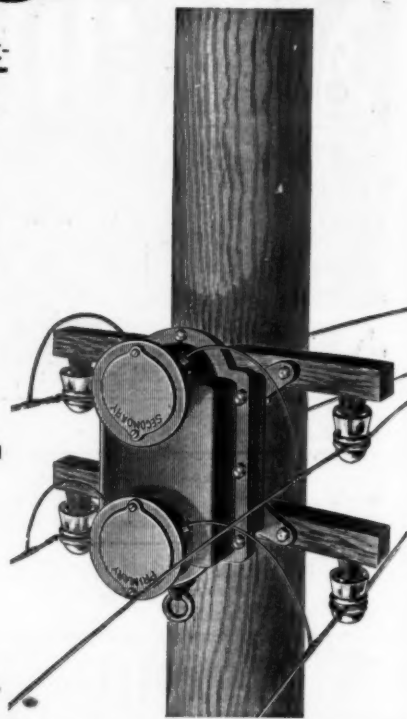


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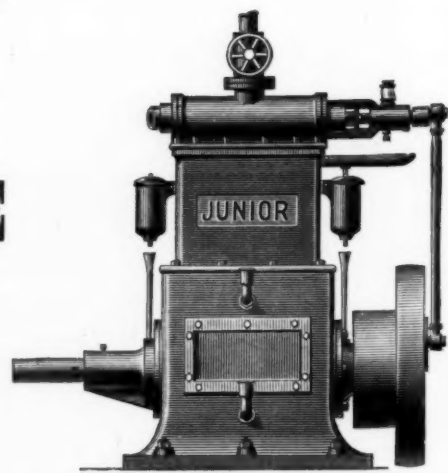
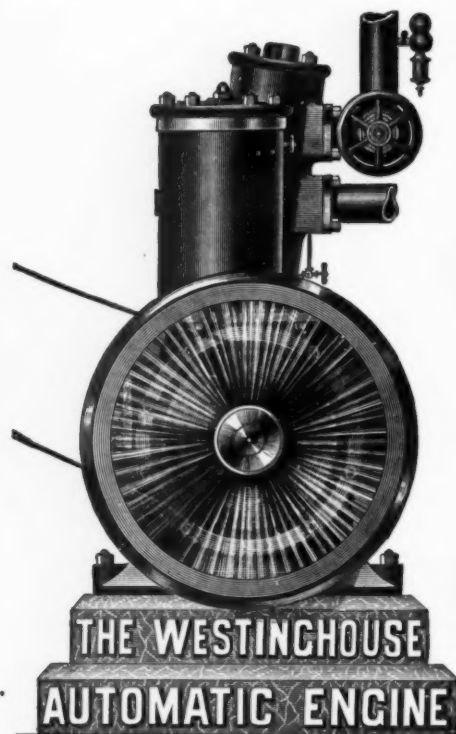
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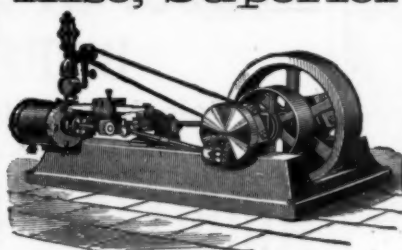
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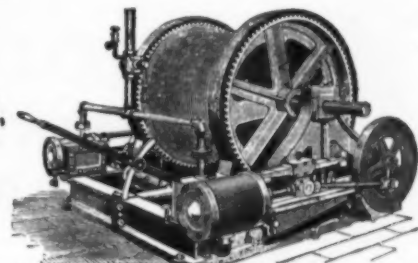


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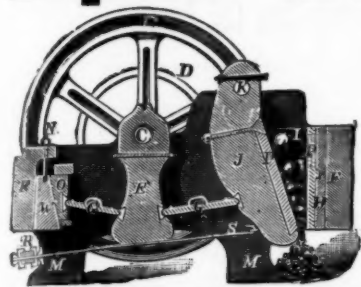
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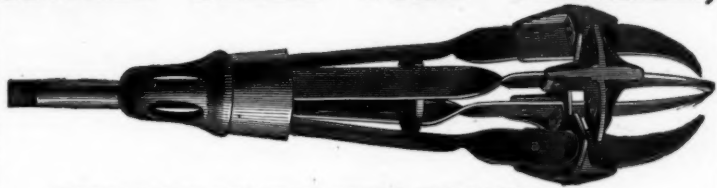
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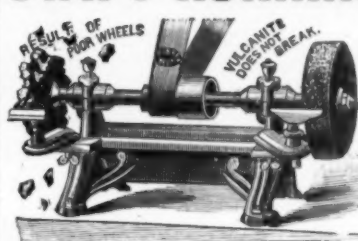
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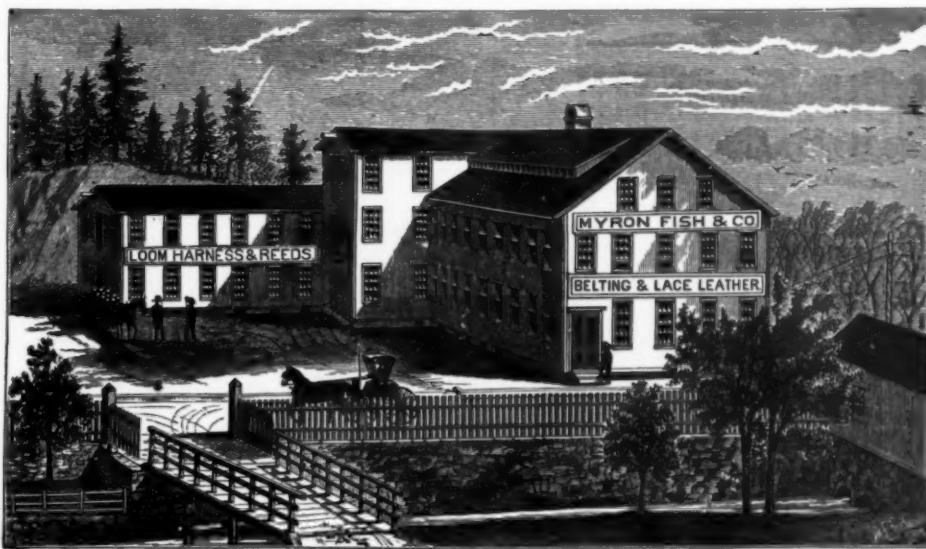
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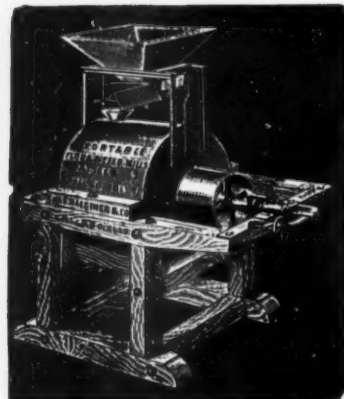
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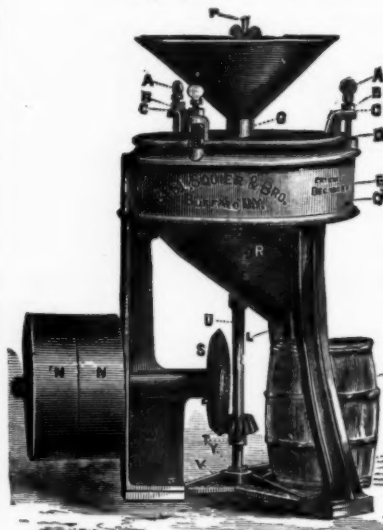
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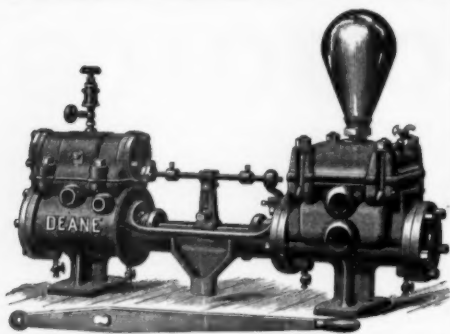
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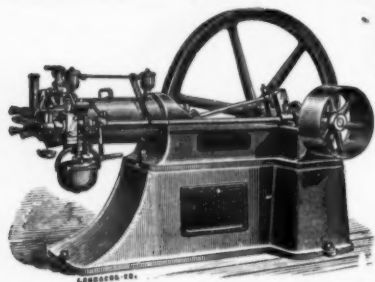
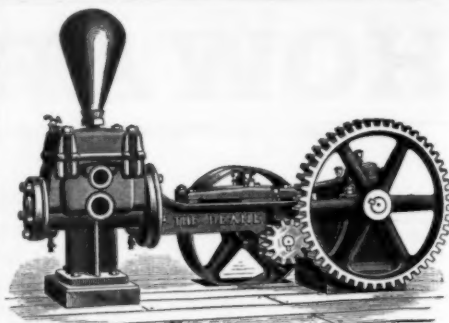
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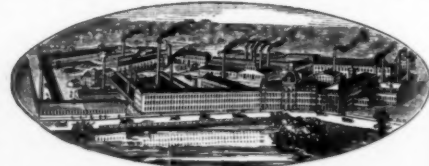
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WM. H. EDMONDS, *Secy. & Manager.*

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BALTIMORE, MAY 21, 1887.

## Prosperity in Cotton Manufacturing.

Reports from Southern cotton mills continue to show increasing prosperity, with mill owners very cheerful as regards the future. Quite a number of new mills are now under construction and many others are projected for early building. The stockholders of the Clifton Mills, of Pacolet, S. C., are so well satisfied with their mill's operations, that they have decided to build another mill to run 15,000 spindles. Eighteen months ago, Col. H. P. Hammett, of Greenville, S. C., and others, purchased the Camperdown Mill of that place, which had been idle for some time, and by good management Col. Hammett had made it a paying property. It is stated by one of the stockholders that this mill earned a clear profit of a little over 20 per cent. during their last fiscal year just ended. All indications point to considerable activity in cotton mill building throughout the South.

In republishing the suggestions in a late issue of the MANUFACTURERS' RECORD regarding the importance of Southern towns advertising their advantages, the Atlanta Constitution adds the very good advice that these towns should also be prepared to show something besides natural resources and advantages. "Good drainage, good streets and good country roads," says that journal, "are indispensable. When a town is making progress in these matters it can advertise itself with some confidence. Outsiders will not come in to build up a town when there is no disposition on the part of the citizens to build it up themselves."

The truth of this is so self evident that it would hardly seem necessary to urge its acceptance, but there is undoubtedly much need to impress these points upon all Southern towns and cities. "Good drainage, good streets and good country roads are indispensable," and they will exert a powerful influence in behalf of every place having these advantages, and the lack of them will do great harm to every place that is so improvident as not to secure these three essentials.

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## Industrial Training.

There is room in the South for a large number of skilled mechanics. In using this term we mean something more than it usually implies, for there are many who can handle the tools of their trade with skill who have been and always will be journeymen. What the South needs is men who have both practical skill and the trained intelligence that enables them to direct the work of others, and, if need be, to show how it should be done. All mechanical pursuits are but so many branches of applied science. The experience of ages has been wrought into the carpenter's rule and the machinist's calipers. The lore of ancient Egypt helps modern architects to draw their plans, and every blacksmith's forge embodies the experience of ages of scientific study, as well as practical work. In 1861 the South was greatly behind in respect to the mechanic arts. Agriculture and commerce had engrossed its attention and employed its activities. About the most noticeable exceptions were the cotton mills of Columbus, Augusta and a few other interior towns, and the ship-building at various places along the coast. Outside of the principal cities there were comparatively few white mechanics. The war brought about a revolution. Its necessities developed an innate skill among Southern men that astonished none so much as themselves. Invention and skill in the use of tools kept pace with each other. Men of collegiate education, planters by occupation, suddenly found themselves building armories, manufacturing rifles and sabres, making powder and doing multitudes of things of which, prior to then, they had no practical knowledge. One such man, Major E. A. Burke, now editor of the New Orleans Times-Democrat, established an immense wagon and harness shop in Texas, which furnished field transportation for all the Confederate armies of the Southwest. A Virginia planter, Major C. C. McPhail, built a large armory at Columbia, S. C., manned it with Southerners, and turned out arms of precision equal to any in the service. The necessity of that period developed mechanical ability and brought it into respect. In those days rhetoricians were held in less esteem than those practical men whose ingenuity and skill helped to arm, equip and maintain armies. The mechanic was a man of note, sought after and made much of by all.

The experiences of the war prepared the South to engage in the activities that mark this era. Every man is in demand that can help forward the mighty work of development. Great as it is, it would be very much greater had the South more men of the kind required. None see this more clearly than the intelligent youth of the country. They are studying at the Tulane University,

at the Boston Institute of Technology, and at other institutions to acquire the knowledge and skill that the times demand. The States also are rising to the needs of the period and are establishing colleges for technical and industrial training. The most recent foundation of this kind is the North Carolina College of Agriculture and Mechanic Arts, to be located at Raleigh. The leading object of this college, as defined in section two of the law "shall be, without excluding other scientific and classical studies, to teach such branches of learning as are related to agriculture and the mechanic arts, in order to promote the liberal and practical education of the industrial classes in the several pursuits and professions of life." Section nine of the same law is: "Every student in this college \* \* shall be required to take a course of manual training or labor, together with the other courses of study and exercise, as the board shall direct." In providing this institution for the industrial training of her young men North Carolina places herself in line with those other States which are fitting their youth for the great duties and responsibilities that the progress of the age will put upon them.

How generally the idea of industrial training has been adopted by the South was exemplified one day last week at Louisville, Kentucky, at the opening session of the Southern Baptist Convention. In an address of welcome to the seven hundred delegates Professor Allemand said: "To keep pace with the work of our Christian soldiery the young blood of our people is bounding along the avenues of material development and progress. Everywhere the spirit is abroad. Our city is expanding. New manufactories are being welcomed. Our State is being developed. Our rivers are being spanned by bridges. Our valleys are being threaded by iron rails and our people are determined that no people in this glad land shall surpass them in supplying the world if need be with the best workmanship of brain and brawn."

The spirit of Kentucky pervades the South, and when to the busy workers of the present there shall be added, year by year, hundreds of eager young men who have had the best attainable industrial training, there will be a prosperity in all the country greater than it is possible now to estimate.

MANAGERS of mills, factories, furnaces, mines, etc., and parties starting manufacturing enterprises, and needing machinery or supplies of any kind, will find it profitable to consult the advertising columns of the MANUFACTURERS' RECORD. Its pages contain names of the best houses in the country among manufacturers of and dealers in machinery and mill supplies.

## Southern Farmers.

Discussing the question as to whether Southern farming interests are becoming more prosperous or not, the Southern Farmer, a well-known agricultural journal, says: "The South is certainly growing more prosperous year by year. New cities are being built, old cities are being enlarged, and a home market for our products provided with a swiftness that has no parallel. A home market for what we raise; a home market for every product of the farm—these are the two essentials to success in Southern agriculture, and these are being built up every day. If a farmer in Lancaster county, Pennsylvania, had to ship his truck to Georgia for a market, as the Georgia farmer now has to ship to Pennsylvania, his prosperity would vanish. As to the actual condition of Southern farmers, it is certainly better than it has been. They are freer from debt; their places are better equipped; they are farming by better methods, and with better implements in a better way. At least this is our observation."

Upon the same subject the Journal, of Newberne, N. C., says: "We have taken the trouble to enquire of leading farmers from various sections tributary to Newberne concerning the condition of farmers generally, and we have almost invariably been told that they are gradually improving; that they are approaching the cash system; are buying less on time and diversifying their crops more, and manuring and cultivating better every year. With one good crop and fair prices their condition would be better than at any time since the war."

## The Value of Home Markets.

J. R. Dodge, statistician of the Bureau of Agriculture, in a recent article, thus spoke of the condition of the farming class in Pennsylvania:

The indebtedness of farmers of Pennsylvania, it is believed, has decreased as compared with ten years ago. It is estimated that not more than 15 per cent. of the farms are mortgaged. The average interest rate is about 5 per cent. Many farmers have property in the other branches of business, and farmers themselves hold in part the indebtedness of other farmers. With an average value of farms according to the last census of almost \$50 per acre—\$1,000,000,000, or about one-tenth of the farm valuation of the United States—owned mainly by the farmers cultivating them, and yielding a product worth \$431 for each person engaged, either as farmer or laborer. In agriculture, the agricultural interests in Pennsylvania may be said to be prosperous, even in the present era of low prices. Of course there are some who will occupy positions of hardship and difficulty. The source of this prosperity is found in the local markets of the State. It is probable that no other State is more nearly self-supporting, and perhaps none that depends on other States or other countries so little either in buying or selling products of agriculture.

This is just what we have tried for years to impress upon the South. A home market for all the products of diversified agriculture is essential to the permanent prosperity of Southern farmers. In traveling through



the South and then through Pennsylvania, one cannot but be struck by the great difference in the degree of prosperity shown by the farming interests, and yet Hon. Wm. D. Kelley recently told the people of Alabama that Pennsylvania is not more richly endowed by nature from an agricultural point of view than their State. What then has made the difference? In Pennsylvania we find immense manufacturing interests employing hundreds of thousands of workmen who consume what the farmers raise, while in Alabama the farmers have devoted their attention mainly to cotton, which they are compelled to ship elsewhere for a market. Diversity in agriculture, as in manufactures is the keynote of prosperity, and it is useless to preach diversity to Southern farmers until a market is furnished to them for diversified products, and then there will be no need of preaching this, for they will of their own accord adopt it just as soon as it will pay.

This is one reason why the building up of the industrial interests of the South is so important to Southern farmers. It is through this means, and this only, that this great essential—a home market—can be secured. In aiding to develop the manufacturing interests of the South the MANUFACTURERS' RECORD is doing its best to aid the farmers of that section.

#### A Gain that will Never be Lost.

The MANUFACTURERS' RECORD has so often given cogent reasons for the permanency and stability of the great industrial advance of the South that is gratifying to see how generally this view of the matter is being adopted. In its last issue the Northwestern Lumberman, of Chicago, discussing the question as to whether there will be a collapse or reaction, says, "the South needed just such a stirring up as it is now receiving. It required a powerful stimulant to wake up the dry bones that had lain dormant for so many years. There were resources in the South that only needed the touch of capital and enterprise to transform them into wealth. Any ordinary process of slow development, without any boom in it, would not have accomplished in a century what has been done in three years. The discovery and development of the Birmingham iron and coal mines was a godsend to the Gulf States, for it started in motion a progress that has created a veritable New South. It has acted like a powerful stimulus in all forms of industry, even that of agriculture having felt the influence. Whatever may come of collapse or panic as a result of over doing and over speculation, the South has gained by the experience of the past few years. A step ahead has been taken that can never be wholly lost. The ideas of the people have been changed. They have discovered their possibilities; they have seen that natural resources can be transmuted into

wealth and all the power that wealth implies. They will never forget this evidence of their senses.

The apprehensive people of the South can be assured of one thing, which is that Northern lumberman, who have invested so largely in Southern timber lands, have done so after careful investigation with their eyes wide open. They have not purchased Southern lands with the view of making a sudden speculation out of them. There is no taint of panic in such undertakings. Out of the abundance of their experience, Northern men, who have grown rich in the ownership of pine lands that were thought 20 years ago to be scarcely worth the taxes on them, see more prospect of a profitable return on their Southern investments within five to ten years than they did on their white pine at any time prior to 1880. The very fact that so much of the timber land of the Gulf States has been transferred to strong Northern hands, into the possession of men who know how to make the most of such holdings, augurs well for the future of Southern timber values. Mills will be built, of modern pattern, railroads for logging purposes will be constructed, and markets will be sought and cultivated. The rapid growth of Southern industrial and trade centers will create a constantly enlarging home demand for lumber, that at no distant day will absorb an important part of mill product.

What is true of the change that is taking place in timber ownership in the South likewise pertains to mining lands and manufacturing privileges. These are being taken hold of by the capitalists of the county, both North and South, who have invested in form to endure through whatever monetary convulsion may come. The vast plants that have been put in at Birmingham, Sheffield and vicinity will remain. The iron and coal industries in North Alabama have been developed for permanence. The manufacturing growth of Nashville and Chattanooga, the trade development of Atlanta, Little Rock and other cities in the South will survive any monetary crisis that may occur. There will doubtless be a revulsion from the present condition of affairs, but the South has made a substantial gain that will never be lost."

#### Two Furnaces Instead of Three.

In reference to the number of furnaces to be built by the Sloss Iron & Steel Co. and the Coalburg Coal & Coke Co., about which there has been some discussion, the following letter will be of interest:

BIRMINGHAM, ALA., May 11, 1887.

Editor Manufacturers' Record:

This company purchased 13,000 acres of coal land and all the other real and personal property of the Coalburg Coal & Coke Co., (not the stock, but property). We also assumed all contracts of the Coalburg Coal & Coke Co.; amongst others, that to build a furnace. After investigation of the furnace under contract and course of erection, we were not satisfied with the plans, specifica-

tions and details, and after some negotiations we made a new contract, by which Gordon, Strobel & Leureau (who were building the Coalburg furnace) agreed to discontinue work on that furnace and build for this company a twin pair of furnaces; so that only two furnaces will be built, not three. These two are the finest furnaces ever constructed in the South. They will cost \$450,000 and have a capacity of 150 tons each daily. The best and most expensive material of all kinds is used. Our furnaces are to be completed, the first on February 1st and second on May 1st, 1888. We are also building now 63 Thomas coke ovens (equal to 150 bee-hive) and will build this fall 63 more. JOS. J. JOHNSTON, Prest.

#### Facts of Interest about Eastern Carolina.

##### The Albemarle Fisheries.

[Special correspondence MANUFACTURERS' RECORD.]

EDENTON, N. C., May 10, 1887.

When "Charles the Second, by the grace of God, of Great Britain, France and Ireland, King, defender of the faith," and sundry other high and mighty titles, was pleased to grant unto "our right trusty and entirely beloved cousin and counsellor George, duke of Albemarle, master of our horse," and to half a dozen other British noblemen, letters patent to an immense province in America, extending from ocean to ocean, neither the donor nor the recipients had the most remote conception of the grandeur of the gift. This charter was dated March 24, 1663, and very soon thereafter a certain portion of the domain was mapped out and named the county of Albemarle, and the movement to colonize it began. But before that day white men had found their way to this beautiful and fertile country, and had settled at various points on the shores of Weapomock, the Indian name for Albemarle sound. These settlers, says an ancient historian, "were chiefly refugees from ecclesiastical oppression, they had no claims on government, nor did they wish to draw its attention. They regarded the Indian natives as the true lords of the soil, treated with them in that capacity, purchased their lands, and obtained their grants." The number of these settlers had so increased as to attract the attention of the home government, which in 1661 instructed Sir William Berkeley, then Governor of Virginia, to give them additional titles to the lands they had acquired, so that they might hold from the crown. Later the lord's proprietors authorized Governor Berkeley to establish civil government in the colony, which he did by appointing Governor Drummond and a council of six, to whom was committed the rule of the community according to the powers granted in the charter. A few years later King Charles granted to the same lords proprietors a new charter more broad and liberal in its provisions than the first. This was given in compliance with a request of the first legislative assembly of the county, which convened in 1667. Under this "great charter," as it was called, there was a considerable increase of population, yet for a generation there was little substantial prosperity. For more than sixty years the colonists suffered from "a constant succession of calamities and disasters." "Anarchy and confusion prevailed against the advantages of soil and climate." The public peace was destroyed and the people "were involved in broils, sedition and misery by the artifice and intrigues of little villains." A sorry time had that first generation of settlers, but there was an improvement later on, and when the British government began its impositions in the eighteenth century, there was no more prosperous colony in any of the States than that which centered at this lovely city of Edenton. Nor was there another more patriotic. On the record book of St. Paul's parish are the proceedings of meetings of the wardens and vestry, at

which measures were adopted for collecting and sending food to the oppressed Bostonians, for creating committees of safety in the various precincts, and for doing sundry other things not usually counted as among the duties of church officials. After the revolution, Edenton pursued the even tenor of its way, and was noted for the wealth, hospitality and refinement of its people. Both before and after the war of Independence it had a very considerable commerce coastwise, with Southern Europe, Africa and the West Indies. Ancient custom house records show that the principal exports from the port of Roanoke (Edenton) were naval stores, lumber, tobacco, corn, hides, pickled meats and herring, and deer skins. Of these there were shipped between January 5, 1774, and January 5, 1775, 3,271,268 pounds of raw deer skins, representing a slaughter of more than half a million animals, and indicating to some degree the extent of traffic with the Indians.

Edenton is now the seat of considerable local trade, but all its foreign commerce is done by Norfolk merchants. The Dismal Swamp and the Albemarle and Chesapeake canals had to a considerable extent diverted trade in that direction before 1861, and what remained was wiped out during the war. With most of its capital gone, its ships destroyed, its old time merchants dead, there was neither the means nor the ambition to attempt to recover what was lost. The serious question in 1865 was how to make a living. Money making, the pursuit of wealth, were postponed to a later and more hopeful period. Three kinds of business, farming, lumbering and fishing, were open to them and to the people of all the country bordering Albemarle Sound. Some engaged in one, some in another, many in all three pursuits. Communication with the outside world was had by the two canals, which were navigated by small steamers. Shipments of perishable stuff from the farms were often delayed so long that when they reached Northern markets they were sold at a loss. The staple crops paid better as a rule and were more and more cultivated. Finally the Norfolk Southern Railroad was built skirting the shores of the sound and opening up quick transportation with sure connections for all the country between Edenton and Norfolk. Since this was done, the trucking business has received a fresh impetus, and the farmers engaged in it are making money.

The fisheries of these waters are however the largest sources of immediate wealth. From colonial days to now Albemarle herring have been held in high repute. They have always formed an important item in the food supply of this country, and in early days they were a chief reliance of the people. There is a tradition that in the reign of King George the First, when irreligion was rampant, and the faithful worshippers few, and when the parson's salary was almost nothing, that the good rector of St. Paul's, if he found Sunday morning the herring running in Queen Anne's creek, which he had to cross on his way to church, would at once send word to the sexton that there would be no service that day, and hastening home he would change his attire and proceed to secure the fish, which glittered in his nets.

The history of the sound fisheries is most interesting. I am indebted to Dr. W. R. Capehart, of Avoca, Bertie county, whose extensive fisheries and plantations are opposite Edenton bay and between the mouths of the Chowan and Roanoke rivers, for most of the following narrative. The most valuable fishes of Albemarle sound are shad, herring, rock or striped bass, sturgeon and white perch. Originally these were caught only in the common gill net, which is still used. These are inexpensive, simple of construction and easily handled. They are made of fine flax thread, not coarser than number one sewing cotton, and are knit in meshes, ranging from one inch square for



herring to three inches square for shad. They are from 20 to 50 feet long and are secured at the top and bottom to a cotton line. These nets are fastened to stakes set at regular intervals, the bottoms being left free to float, thus leaving the nets as flexible as possible. When fish strike them they become entangled like flies in a spider's web. This primitive system was in time adopted by so many that all Albemarle sound was occupied by rows of gill nets, care being taken to leave passage ways for navigators. The profits of this industry drew so much capital into it that in a single season the American Net & Twine Co., of Boston, Mass., sold to a citizen, who was agent for a Northern capitalist, three tons of this spider's web, which was set across the inlets through which shad move from the ocean to their spawning beds on the upper sounds and rivers. The season for gill nets usually extends from February to the latter part of April.

Seine fishing was done in the Roanoke and Chowan rivers long before it was attempted on the sound. The nets were but a few hundred yards long and all the appliances were on a small scale as compared with now. In 1807 Mr. Jos. B. Skinner, an eminent lawyer and a large and successful planter of Chowan county, established a fishery on what is now known as Skinner's Point,  $\frac{3}{4}$  miles from this city. It was a bold thing to clean a beach and attempt fishing with a seine on this wide and boisterous inland sea. The most experienced men at that day looked upon it as "venturous if not impracticable." Mr. Skinner's venture proved a success and prepared the way for larger operations. In 1823 Mr. Starke Armistead cleared a beach and began fishing at Black Walnut Point, on the Scotch Hall plantation, having bought the right from the grandfather of Dr. Capehart. He used a seine 700 yards long made of tanned thread instead of cotton twine. He had seen fish running freely there and expected great things from his first haul. It brought nothing, at which he was very much depressed. Stephen, a faithful and sensible slave, noticed this and called out cheerily: "Never mind, master; try em again; a better day coming." The master took heart, the seine was again shot and came back to land with the marvelous draught (for those days) of 701 shad. The dryness and lightness of the seine the first time floated its bottom, so that the fish ran under it and escaped. From that time on seines were enlarged and apparatus improved until stationary steam engines drew the seines to the beaches, and large flats propelled by ten stout oarsmen carried them to the shooting ground. With these appliances nine hauls could be made in 48 hours. Ten years ago Captain D. M. Warren made the latest addition to fishing facilities by decking over the 50-foot bateaux and putting into them 6-horse engines, thus converting them into side-wheel steam flats. This gave a pair of boats that would go faster and through rougher seas, and add at least one to the daily hauls. This revolution has called a higher grade of employees to the fisheries, for each boat has its engineer, captain and pilot. There are in these waters, from the north end of Roanoke Island to the mouth of Roanoke river, ten large fisheries using the most improved steam appliances, running seines from 2,500 to 3,000 yards long, and employing every spring many hundred people at good wages for an average of 60 days. These ten concerns employ in their business an aggregate of nearly \$400,000, exclusive of the value of their beaches.

The sound fisheries are over for the season, and owners are repairing and stowing away their nets, putting their steam flats and boats under shelter, and otherwise making things snug until next February, when they will get ready for another season's work. The river fishermen are closing their spring campaign, and soon the pound nets in the Roanoke, Chowan and other streams will all be laid by. Pound nets were first used in

Albemarle fisheries in 1868 by a Pennsylvania "Dutchman," who brought several here, and, entering into partnership with a native citizen, put them into the water off Sandy Point. This mode of fishing proved successful and soon became very popular. Many hundreds Dutch nets, as they are locally called because of their introducer, are now used all over the sound and its tributaries. These nets are generally set in February and taken up in June. Some owners have of late years put them in the water in September to catch striped bass and other fish that are late in returning to the ocean. For this kind of fishing boats are used twenty feet long, six feet wide, of peculiar build, that carry two leg-o'-mutton sails and a crew of three men. A stand of five pounds, the usual number here in one set, costs \$1,000, the boat \$150, or the entire plant \$1,150.

Purse-net fishing was introduced in 1880 for the purpose especially of catching striped bass. These voracious fish run in immense schools, whose presence and line of direction are shown by the gulls that hover over them to pick up the fragments of fishes they leave floating on the surface. Swift sailing vessels are employed in this industry. When the course of the fish is ascertained these vessels run some little distance ahead and spread their net with its huge wings. When the school is well within it the net is drawn and everything, great and small, is caught in the purse, from which there is no escape. At first but one or two were engaged in this branch of the fishing industry, but within three years so many have taken it up as to have made a perceptible difference in the catch of striped bass by the Albemarle seine and pound fisheries.

A great impetus was given to the fisheries of Albemarle in 1867, when first fresh fish, packed in pounded ice, were sent to Northern markets. This paid so well that now nearly all the shad, striped bass, white perch and earlier catch of herrings are marketed in this way. Boxes are made, 42 inches long, 24 inches wide and 12 inches inside depth, which will contain, besides the ice, from 65 to 80 shad, 500 herring, or 200 pounds of other fish. Up to 1870 Baltimore handled all the Albemarle fish, but since then they have been sold also in Richmond, Philadelphia and New York. With the facilities afforded by the Norfolk Southern Railroad and its connections fresh fish are promptly forwarded, and in four days after they were caught their owners receive the checks for their value. After herring have been running fifteen days it no longer pays to send them in ice to market, and the later catches are salted and pickled.

The season just ended has been profitable to all concerned. The run of shad was excellent, and of herring enormous. At some of the fisheries single catches brought far more than could be handled, and loads were carted out upon the land to fertilize the corn fields. All the offal is now carefully saved, the brine also, for this purpose, and as most of the fishery owners have large plantations, the indirect profit from this feature of the business is a considerable item.

There is an irresistible fascination about the Albemarle fisheries. Through the kindness of Dr. Capehart, I spent several days at Avoca beach watching the operations. The weather was fine, the moon well on in its second quarter, the fish at times plentiful and at others few. Every week work begins at midnight Sunday, and ends the next Saturday night. The force on the steam flats are changed sufficiently to give all a rest, but the shore hands catch their sleep by snatches in the five hours' intervals between the landings. The landing place and fish-house here are midway between the two hauling-houses, which are about 3,000 yards apart. Opposite this landing, at 2,700 yards or nearly  $1\frac{1}{2}$  miles away in the sound, is the lantern stake, showing where the seine is to be shot. The two steam flats, each having

piled on its stern deck one-half of the great seine and the big coil of hauling rope, start out side by side and keep together until they reach the station. There, turning stern to stern, they move steadily off to the right and left, the men paying out the seine until it is all immersed, whereupon, turning their bows shoreward and paying out the hauling rope as they go, they run to their respective engine houses, where connection is at once made with the steam windlass, and the work of drawing the net begins. At first nothing can be seen by the unassisted vision except the sparkling of the water on the taught rope near shore, but after a little the barrel floats at either end are visible, dark specks on the surface of the sound. Nearer and nearer it approaches until finally the corks appear, a great crescent of black beads floating on the still sea. Shortly the steamers whistle their summons, and the seine men, who have been ashore eating or napping, go to their stations on the flats or in the water. Most of them wear rubber boots with extension tops reaching to their breasts, oilskin jackets and "Souwester" hats, and are as hardy, active and muscular fellows as are to be found. Steadily the seine is drawn upon the flat and dexterously laid in place and position to be run off again. Some tend the rope and some the mesh, every one knowing his place and work, and no counter-jumper handles his dress goods more deftly than do these stalwart negroes this great cotton cobweb, with its sinkers, floats and ropes. It does not take long for these expert seinemen, assisted by the engines ashore to get in the great wings of the net and prepare for the landing. Then the shore engines stop, and the ropes are transferred to great wooden drums turned by horse-power. A negro boy engineers the animal, which travels steadily around its course. A stout fellow stands at the water's edge, and with forked stick pressed into the sand keeps the rope from being lifted. The boat moves slowly towards the landing place, continuing to receive its burden of seine; two stout men wade out to the further end of the seine which has now become an ellipse and keep close watch to guard against accidents, and so at last the landing is reached. The horses cease their rounds, all hands are summoned, and manual hauling begins. Some haul the upper, some the bottom line, the latter keeping it close to the ground and working fast to get it all in. Suddenly the order is passed and the ground line is buttoned to a row of pegs driven into the plank flooring. Then with steady pull, and, if the net is heavy, many a melodious heave ho, (or something its equivalent,) the bunt is drawn in, until finally, with a spattering and a slapping, and a hissing like that of fermentation, a mass of life shining like burnished silver is securely landed, and the haul is over. Without the loss of a minute the boats secure the rest of the seine and start on another trip of the same kind.

"Pick up your shad!" shouts the foreman, for in here are shad, rock, herring, perch, eels, cat, red horse, and what not, but first the shad, for they must be soured clean, iced and made ready for shipment by next train. Square crates set on legs with pairs of handles at either end are produced and quickly filled, carried inside, and the fish dumped into a long broad trough half filled with water. Thoroughly rinsed they are counted out into the boxes, rows in one part, bucks in the other, iced as they are packed, and before they have done quivering they are fastened down and ready for forwarding.

Rocks are served in the same way, and then the herring are shoveled up and heaped on the dressing-counter, where a line of negro women stand, each with three tubs convenient, and it's wonderful how fast they dispose of those fish, the offal going into one tub, the roe herring into a second, the cut into a third. As fast as the tubs are filled men carry the fish to the washing place, cleanse them thoroughly and take them to

the salters. Before the seine returns the landing platform is washed clean and everything prepared for a repetition of the performance.

Very often there are sturgeons caught, in which case they must be taken from the water before pulling in the bunt. They would make it lively for all concerned otherwise, besides damaging the net. Strong steel hooks set on stout handles are therefore in readiness, which, when needed, are tossed to the guardians in the water. They are strong men experienced in such business, but often when they have a big fellow to handle, they are taxed to the full of their powers to get him out. At times too frequent for the comfort of the fisherman the seine catches upon some floating thing like a drift log and is badly torn, or what is worse, upon something long buried under the sound, which has been uncovered by the sweep of the net and the strength of the current, and will remain as a permanent injury until it can be found and removed. Then there are freshets in the Roanoke that bring a muddy discoloration to the sound and drive the fish away in search of clear water. All these are drawbacks to the business that help to make the aggregate of experience known as fisherman's luck.

The returns for this season's fishing in Albemarle waters are not all in, but the following are the figures of Dr. Capehart's catch for the present and several preceding years.

	Shad.	Herring.
1883 .....	97,830	959,805
1884 .....	30,345	215,230
1885 .....	27,005	181,068
1886 .....	61,864	386,579
1887 .....	55,980	350,000

It will be noticed that in the past two seasons there has been a very large increase in the number of shad over the three preceding years. This is unquestionably due to the work of the State's fish commissioners, who had charge of a hatchery in these waters several years ago, and turned into them a vast number of fry, which, having grown to suitable age, have been for two years "reporting for duty" at all the fisheries of Albemarle.

B. S. P.

### Literary Notes.

WE have received from Messrs. John L. Williams & Son, bankers, Richmond, Va., a copy of "A Manual of Investments," which is a little book of 65 pages containing important facts and figures regarding Southern investment securities. The information conveyed in this publication is of the kind which every intelligent person should possess before investing. A novel and invaluable feature of the Manual is a map classification of Southern railroad systems, thus: Atlantic & Coast Line (920 miles), Central, of Georgia (2,000 miles), Chesapeake & Ohio (1,825 miles), Richmond & Danville (4,175 miles), East Tennessee, Virginia & Georgia (1,429 miles), Seaboard & Roanoke (572 miles), etc. All these systems are shown on the map, each in a distinctive color, and are fully described in the text—that is to say, reports of the financial condition, resources and the like are given. The report on the Richmond Terminal or Richmond & Danville system is exhaustive, and of especial interest just at this time when rumors of railroad deals fill the air. Copies of the Manual can be found at the Baltimore News Company's depot.

"RAILWAY PRACTICE, ITS PRINCIPLES AND SUGGESTED REFORMS REVIEWED," by E. Porter Alexander, is the title of a 60-page pamphlet issued by G. P. Putnam's Sons, publishers, New York and London. This publication is an intelligent discussion of railway tactics, so to speak, by a thoroughly educated railway man. All who have read the articles and books of Mr. Adams, Prof. R. T. Ely and Mr. T. F. Hudson, to say nothing of the interstate commerce law, will be deeply interested in the critique and suggestions of Mr. Alexander.



# CONSTRUCTION DEPARTMENT.

**WE PUBLISH, every week, a list of every new factory, of whatever kind, projected anywhere in the South; every railroad undertaken, and every mining company organized. This information is always fresh, and, by enabling manufacturers to correspond with the projectors of such enterprises before their supplies of machinery have been purchased, is of great value. Manufacturers will find it to their interest to read this department carefully each week.**

## ALABAMA.

Alpine.—T. Reynolds, H. A. Haralson, of Selma, and others, will organize the Nottingham Railroad & Improvement Co., capital stock \$300,000. The company will purchase and extend a narrow gauge railroad and build a 25-ton charcoal furnace. A cotton factory is to be built also.

Anniston.—W. C. Stewart and J. S. Davidson, of Birmingham, have leased and will operate the Barry & Draper planing mill.

Anniston.—J. J. Childs, of Rome, Ga., has prepared plans for the Anniston Gas Works, previously reported, and will probably contract to build the works.

Anniston.—Several new manufacturing enterprises are being worked up.

Bessemer.—W. B. Gere and A. C. Sharply, of Birmingham, contemplate starting brick works.

Bessemer.—The De Bardeleben Coal & Iron Co. are now opening their new coal mines previously reported. Their output will be 3,000 tons daily when in full operation.

Bellefonte.—Vaughan & Martin are building a saw mill.

Birmingham.—It is reported that B. M. Long has sold 40,000 acres of coal lands.

Birmingham.—It is stated that the Birmingham Furnace & Manufacturing Co. will shortly begin work on their 2 furnaces previously reported. Robert Hogsett, of Uniontown, Pa., is president.

Birmingham.—H. W. Session has erected a creamery.

Birmingham.—The Alabama-Connellsville Coal & Coke Co., previously reported, are preparing to open mines with a daily capacity of 2,000 tons.

Birmingham.—The Birmingham Safe & Lock Co., capital stock \$50,000, has been organized by H. F. Bridewell, Fred. Sloss, M. Sloss and others to manufacture fire and burglar proof iron safes, vault doors, &c.

Birmingham.—A system of water works will be built at Lakeview.

Birmingham.—The Alabama Medical & Surgical Journal Co., capital stock \$15,000, has been chartered to print and publish books, papers, etc.

Birmingham.—The Automatic Water-Gas Co. has lately been organized.

Birmingham.—The Jefferson Brick Co., capital stock \$40,000, has been organized with R. F. Hudson, of Columbus, Miss., as president; E. F. Manning, New Orleans, La., vice-president, and F. C. Dunn, secretary and general manager. They have bought and will enlarge the brick works of Carroll & Carroll.

Calera.—The Calera Land Co. have decided to commence the erection of water works, previously reported, immediately.

Collinsville.—A furniture factory will be erected 4 miles from Collinsville by Mr. Morgan.

Collinsville.—Pyron & Johns are erecting brick works.

Decatur.—A hotel, 55x110 feet, will be built by Mr. Ivens.

Decatur.—A. H. Howland, of Montgomery, and associates will build the street railroad previously reported. They solicit correspondence.

Demopolis.—George A. Rhe has the contract to erect the buildings for the Marengo Institute and a building for the cotton compress of John C. Webb.

Gadsden.—Gwin, Hicks & Lane will enlarge their sash, door and blind factory.

Guntersville.—Samuel Holt, Henry Holt and J. D. Holt are erecting brick works.

Lim Rock.—The Belmont coal mines are being reopened by the Alabama Black Band Coal, Iron & Railroad Co.

Lincoln.—Williams & Haley will erect a saw mill and may add other machinery later on.

Montgomery.—The Sheffield & Birmingham Coal Co. has been organized with J. W. Dimmick as president, and G. W. Craik, secretary and treasurer. The company own 12,000 acres of coal lands in the Warrior coal fields.

Seale.—Russell county will build a new jail.

Talladega.—Willis Shaw will erect an ice factory and brewery, and desires catalogues, etc., of ice machinery.

Talladega.—The Macon, La Grange & Birmingham Railroad Co. and the Birmingham, Georgia & Florida Railroad Co. have arranged to build a direct line from Birmingham via Talladega to Savannah, Ga., with a branch road to Brunswick. The \$1,000,000 construction company, reported last week, will build the road.

Talladega.—Golden & Nance have started a machine shop to manufacture the Nance gin saw gummer and pointer.

Tecumseh.—The Tecumseh Iron Co. have blown out their furnace for repairs.

Troy.—The Alabama Midland Railway Co. have let the contract for building their road from Montgomery to Bainbridge or Chattahoochee to the Alabama Terminal Improvement Co.; J. W. Wolfolk, of Montgomery, president.

Troy.—Surveys are being made for the extension of the Mobile & Girard Railroad, (office, Columbus, Ga.)

Tuscaloosa.—The Tuscaloosa Coal, Iron & Land Co. will build coke ovens.

Tuscaloosa.—The name of the \$25,000 stock company previously reported as organized to manufacture brick and tiles, with M. Thomas Devereux as president, is the Tuscaloosa Tile & Brick Co.

Tuscaloosa.—A company is being organized to build an iron furnace. The Tuscaloosa & Castle Hill Real Estate & Manufacturing Co. can probably give information.

Waddell's Station.—Crow & Robinson, Oreville, Ga., are opening another stone quarry and are putting in steam drilling machinery. They will also develop iron or mines.

## ARKANSAS.

Alma.—The Little Rock & Fort Smith Railway Co. (office Little Rock) will build a railroad from Alma to Lilley.

Antimony City, Howard Co.—Roberts, Morris & Co. state that they will erect the Bessemer steel works previously reported.

Camden.—A company is being organized to erect a cotton compress. J. S. Holmes can probably give information.

Dardanelle.—The Dardanelle Mining Co., capital stock \$25,000, has been organized by G. L. Kimball, Robert Veazey, Z. J. Pierce, Thomas Cox, James K. Perry, R. E. Cole, J. J. George and others.

Hot Springs.—P. W. Masters is developing gold and silver mines near Hot Springs.

Hot Springs.—The capital stock of the Hydro-Carbon Fixed Gas Co., reported last week as organized with L. D. Cain as president, is \$50,000.

Hot Springs.—The Hot Springs Street Railroad will be extended.

Little Rock.—J. R. Turner will, it is reported, start a tile factory.

Little Rock.—Elizah Ives will erect a saw mill near Little Rock. Has contracted for machinery.

Little Rock.—D. R. Wing & Co. contemplate building new and larger works.

Prescott.—The Prescott Lumber Co., reported last week as incorporated, will add some new machinery to their planing mill, and contemplate building seven miles of logging railroad during the summer.

Texarkana.—B. D. Harrell and associates will build a street railroad two miles long.

## FLORIDA.

Apalachicola.—It is stated that John T. Leslie, of Tampa, and others have bought the Brash lumber mill and will repair it and put it in operation.

Bellevue.—Messrs. Keeler and Brooks contemplate erecting a rice mill.

Brooksville.—Lime works have been started by T. E. Kirkley.

Carrabelle.—A company has been formed to manufacture phosphate.

Chipley.—J. Gould will build a school.

Dade City.—A \$15,000 hotel is to be erected.

Key West.—The Key West Gas Co. have received permit to erect an electric-light plant.

Jacksonville.—The Arctic Ice Co. have purchased an additional 10-ton machine for their factory, and are negotiating for another machine of same capacity.

Jacksonville.—The Park Theatre Co., J. W. Archibald, president, whose theatre is reported in this issue as burned, will build a new one of brick.

Sanford.—H. C. Griffin has received the contract to build the Orange Belt Railroad from Oakland to Point Pinellas.

Sanford.—W. M. French will, it is said, move his artificial stone works from Orlando to Sanford.

St. Marks.—It is stated that Mr. Slusser, of Tallahassee, will build a hotel.

Tallahassee.—Bills have been introduced in the legislature to incorporate the Alabama Midland Railway Co.; a company to build a railroad from near Lake George to the Gulf of Mexico, and a company to operate a canning factory at St. Lucie.

## GEORGIA.

Athens.—E. L. Lyndon will rebuild and improve the Witherspoon planing mill near Athens.

Atlanta.—The Georgia Improvement Co., A. C. Harris, general manager, are advertising for 100,000 cross-ties.

Atlanta.—J. M. High will erect a \$10,000 residence.

Atlanta.—E. C. Peters will build a dummy street railroad.

Atlanta.—There are prospects of a type foundry being started. W. C. Dodson can give particulars.

Augusta.—The Southern Cotton Oil Co., of Philadelphia, Pa., are prospecting for a site for a 150-ton cotton-seed oil mill.

Augusta.—The Georgia Central Railroad & Banking Co., J. W. Green, general manager, will improve their car repair shops.

Barnesville.—W. P. Bussey is building new variety works.

Brunswick.—Newman & Greer have commenced work on their ice factory previously reported.

Brunswick.—A \$60,000 hotel will be built on St. Simon's island.

Brunswick.—C. P. Goodyear is president; U. Dart, secretary, W. E. Kay, treasurer, and T. W. Dexter, superintendent, of the Patent Piling Protection Co., previously reported. The company propose to erect plants at the principle Atlantic ports.

Cedartown.—The Cherokee Iron Co. write us that they will not build coke ovens as stated last week.

Dawson.—S. V. Brown is building an addition to his carriage factory.

Gainesville.—J. T. Hargrove has erected a saw mill 3½ miles from Gainesville.

Gainesville.—The city will decide by a popular vote whether or not to issue \$10,000 of bonds to build water works.

Gainesville.—Daniel M. Stringer will erect a large brick building, 70x100 feet.

Macon.—The resolution "that an invitation is hereby extended to any corporation to erect in the city of Macon a complete system of water and gas works; that for the purpose of promoting said enterprise the city of Macon pledges the cordial support to make such undertaking a success," has been passed by the city council.

Macon.—There is talk of building new water works.

Macon.—John Knight has the contract to erect the factory for the Eureka Potash Co., previously reported.

Macon.—Ulysses M. Gunn has lately started a fence factory, and wants wood-working machinery.

Rockmart.—The Georgia Lime & Cement Co. will build lime works.

Rockmart.—E. H. Cady will develop ore mines.

Rome.—The name of the company lately reported as organized to start a fence factory is the Farmers' Friend Fence Machine Co. The capital stock is \$30,000. The incorporators are J. B. S. Holmes, J. B. Hill, W. S. Crane, H. D. Cothran and others.

Rome.—The capacity of the brick works of Rogers & Reynolds, lately started, will be increased from 30,000 to 90,000 brick per 12 hours. They have contracted for an electric light plant, and will run their works night and day.

Savannah.—The Georgia Central Railroad & Banking Co., in addition to building the extension to Decatur, Ala., reported last week, will extend several of their branch lines. The company will issue \$5,000,000 of bonds.

Wrightsville.—The directors of the Wrightsville & Tennille Railroad Co. have been authorized to extend their road.

## KENTUCKY.

Bellevue.—The Bellevue Natural Gas & Oil Co., previously reported, have organized with G. R. Harms as president; Adam Smyrl, vice-president; Frank B. Wentworth, secretary, and Mr. Barker, treasurer.

Berksville.—An \$8,000 college is to be erected. Charles W. Boulton is preparing plans.

Covington.—The Kentucky & Ohio Natural Gas, Oil & Mining Co. has been incorporated by W. H. Glone, S. Y. Black, George W. Castlen, James Claggens and W. R. Arnick. The authorized capital stock is \$1,000,000.

Covington.—Ground has been selected on which to build the three reservoirs, previously reported. The mayor can give particulars.



Henderson.—George H. Delyin & Co. have repaired and improved the Henderson Brewery.

Henderson.—Henderson county has voted \$75,000 to aid in the construction of the Tennessee Midland Railroad.

Lexington.—Abram T. Ware, John H. Goff and Henry C. McDonald have incorporated the Goff Land Co., capital stock \$50,000, to buy and sell and develop timber and mineral lands. H. C. McDonald is president.

Louisville.—The Louisville Brick Co. will erect machinery to manufacture terra cotta lumber.

Louisville.—The Louisville Southern Railway Co. will build their machine shops at Louisville, and not at Harrodsburg, as stated last week. They will cost \$50,000.

Louisville.—The Central Passenger Railway Co. are building two miles of new track.

Louisville.—The Falls City Natural Gas Co. has been organized to bore for oil and gas, refine and manufacture oil, &c. The authorized capital stock is \$1,000,000. T. P. Benjamin is president; Horace Scott, vice-president; Walter Irwin, secretary, and T. J. Guthrie, treasurer.

Louisville.—Daniel B. Horton, James H. Kidder and John L. Tillman have chartered the Simpson Gold Mining Co., capital stock \$250,000. Its object is to buy and sell and develop mineral properties, principally in Idaho.

Owensboro.—H. L. Damm, of Stephensport, contemplates erecting a large furniture factory.

Owensboro.—It is rumored that an ice factory will be erected.

Paducah.—The city has voted \$100,000 towards the construction of the St. Louis & Ohio River Railroad, \$50,000 to the Cypress Junction & Shawneetown Road, and \$50,000 to the Saline County Road.

Winchester.—A hemp factory will probably be erected by an Eastern party.

#### LOUISIANA.

Boyce.—The Texas & Pacific Railroad Co. (office, Dallas, Texas,) are building a round house and machine shop.

Logansport.—Two saw mills are to be erected soon.

Monroe.—Efforts are being made to build a \$5,000 grist mill.

New Orleans.—R. B. Mitchell will rebuild his cistern factory reported last week as burned.

New Orleans.—The Brush Electric Light Co. will add to their present plant a 5,000 light plant of the Westinghouse system.

#### MARYLAND.

Baltimore.—Marburg Bros. will build a large 7-story addition to their tobacco factory on South Charles street. Charles Markland has the contract.

Baltimore.—The Second Universalist Church Society have bought a site corner of North and Lanvale streets for their new church previously reported.

Baltimore.—The Union Passenger Railway Co. contemplate extending their Catonsville road from Catonsville to Ellicott City, and running their cars by electricity.

Cumberland.—Capitalists are negotiating for a site, with a view to building a large pulp mill.

Deer Creek.—Charles A. Rutledge will build a new saw mill and another canning factory.

Flintstone.—Messrs. Laing and Hopkins, reported last week as to develop a silver and lead mine, will organize the Flintstone Mining Co.

Frederick.—There is talk of erecting an electric light plant.

Joppa.—J. B. Hanway has erected a new canning factory.

Salisbury.—The Methodists will soon begin work on their new stone church. It will cost \$15,000.

Washington.—The Washington Monument Society contemplate erecting a 1-story marble building.

#### MISSISSIPPI.

Greenville.—The Greenville Water Works Co., reported last week as formed by F. L. Bates and others, have contracted with the city to build water works and will begin work within 60 days.

Natchez.—Robert Clark will re-establish his carriage factory.

Natchez.—Thomas Reber has contracted for the machinery for his electric-light plant previously reported.

Vicksburg.—The Warren Oil Mills contemplate moving their mills to another site.

Yazoo.—The Brush Electric Light Co., of Cleveland, O., are negotiating for the erection of an electric-light plant.

#### NORTH CAROLINA.

Bost's Mills.—Bost & Cannon have started plow works. About \$3,000 is invested.

Collinsville.—Jones Cope and will enlarge operations at his gold mines.

Davidson College.—M. W. Crawford has started a harness and boot and shoe factory.

Dunn.—Harper & Parker have, it is said, started brick works.

Dunn.—Allen B. Goodwin has erected a buggy factory, 30x140 feet.

Emma.—Penniman & Patton will start brick works near Emma.

Greensboro.—It is reported that a street car line will be built.

Greensboro.—A smoking tobacco factory will probably be started.

Greensboro.—Peterfish & Gibbs, of Staunton, Va., will start a cigar factory.

Hickory.—J. G. Hall, O. M. Royster and D. W. Shuler are interested in the company previously reported as being organized to build a hotel.

Kinston.—H. C. Parrot has moved his saw mill from Goldsboro to Kinston.

Mooresville.—A cotton factory is reported to be built. J. V. Templeton can give information.

Mountain Island.—The Mountain Island Manufacturing Co. are putting in an additional water wheel.

Rutherfordton.—T. I. Watson has erected a grist mill 5 miles from Rutherfordton, and will add a flour mill.

Southern Pines.—A planing mill is being erected by H. A. Bland.

Statesville.—J. W. Mangum, of Shelby, contemplates starting a tobacco factory.

Wilmington.—F. Gardner, engineer Manchester & Augusta Railroad, will receive proposals until June 1 for building 20 miles of said railroad between Sumter and the Santee river.

#### SOUTH CAROLINA.

Camden.—W. E. Glenn will establish a brick yard.

Charleston.—Welch & Eason have recently erected a coffee-roasting establishment.

Chesterfield County.—E. Motz will erect an 80-stamp mill at his Brewer gold mine, and will increase the capacity of his machinery.

Clifton.—The Clifton Manufacturing Co. will build an additional cotton mill at a cost of \$300,000.

Glendale.—W. B. Richardson, A. G. Willis and F. S. Upton have secured the mineral right on 500 acres of gold land which they will develop.

Greenville.—Arrangements are being made to start a tobacco factory.

Hampton.—A saw mill has been erected by Mauldin & Son.

Laurens.—The brick works reported last week will probably be started by S. D. Garlington.

Sumter.—Mallett Bros. are preparing to rebuild their saw mill previously reported as burned.

Sumter (near).—Moses & Harby, lumber men, are building a standard gauge railroad.

Waterloo.—J. T. Harris is erecting a flour mill and a ginnyery.

#### TENNESSEE.

Bristol.—R. C. Cooke, representing a New York company, has purchased the mineral right on 1,200 acres of land. It is rumored that a furnace is to be built by the company.

Bristol.—W. F. Collins will start a broom factory and wants to purchase machinery.

Bybee.—B. F. Richardson is reported as preparing to develop a gold mine.

Chattanooga.—The Ridgetale Water Co., capital stock \$10,000, has been formed at Ridgetale.

Chattanooga.—The Union Iron Works Co., capital stock \$50,000, has been incorporated by D. McIntosh, of Pennsylvania, and Alfred Webb, F. I. Stone, W. E. Reynolds and F. F. Wiehl. The company will enlarge and operate the boiler works of A. Webb & Co. and the barb wire factory of F. I. Stone.

Chattanooga.—The Standard Gas Machine Co., previously reported, are starting their factory to manufacture gas economizers and independent gas plants.

Chattanooga.—The Tennessee & Alabama Railroad Co. has been incorporated to extend the Memphis & Charleston Railroad (office, Memphis,) from Stevenson, Ala., to Chattanooga, Tenn.

Chattanooga.—The Chattanooga Tool Co., capital stock \$50,000, has been organized with W. G. McAdoo as president; H. Jacobs, vice-president and superintendent, and Walter Scott, secretary and treasurer. They will move the Loraine (Ohio) Tool Works to Chattanooga.

Chattanooga.—W. T. Burkam, H. C. Beck, T. D. Young, S. W. Adams, C. E. James, H. Clay Evans and others have chartered the North Chattanooga Water Works Co. to build water works at the new town to be started by the North Chattanooga Land, Coal, Iron & Railway Co.

Chattanooga.—The Chattanooga Ice & Storage Co. are building an addition to their works at a cost of about \$8,000. A. J. Stoops & Bro. have the contract.

Chattanooga.—The W. B. Barry Saw & Supply Co. have enlarged their factory.

Chattanooga.—The hotel reported last week to be built by the Lookout Incline Railway Co. is to be three stories, 60x250 feet, and will cost about \$40,000. Work on it has been commenced.

Chattanooga.—T. J. Lattner & Co. are purchasing new machinery to enlarge their tack factory recently started.

Chattanooga.—It is reported that James Manker, of Mobile, Ala., is prospecting for a site for an axe handle factory.

Chattanooga.—F. I. Stone, J. T. Clift, F. Gibson, R. L. Bright, H. C. Friell and F. J. Waddell have incorporated the Southern Grate Co., capital stock \$200,000, to mine coal, iron, &c., erect furnaces, foundries, &c., manufacture iron or steel, &c.

Chattanooga.—Stoops Bros. have leased an old factory building and will fit it up with machinery for a planing mill.

Chattanooga.—D. J. Chandler has added to his brick works machinery for making pressed brick.

Cleveland.—The Brush Electric Light Co. of Cleveland, O., are negotiating for the erection of an electric light plant.

Columbia.—W. J. Oakes is receiving machinery for his new furniture factory.

Columbia.—Lovie Loftin is trying to arrange for building a 5-mile turnpike.

Cumberland Gap.—The American Association, limited, of London, England, reported last week as purchasing 7,000 acres of

mineral lands through A. G. Simrall, of Covington, Ky., are preparing to develop the lands. A. A. Arthur, of Knoxville, is probably interested.

Fayetteville.—The Middle Tennessee Marble & Manufacturing Co., capital stock \$200,000, has been organized with R. L. Bright as president; W. C. Bright, vice-president; H. R. Shepard, secretary and general manager; and Hugh Francis, treasurer. Extensive quarries will be developed at once.

Jackson.—\$33,000 has been subscribed towards the erection of the \$100,000 cotton mill, previously reported. Louis J. Brooks and W. P. Timberlake can give information.

Jenks.—The Oakdale Furnace Co. are reported as testing coal for making coke with a view to building ovens.

Johnson City.—D. G. Colson, of Pineville, Ky., has purchased a site of 6 acres and will erect a factory to employ not less than 50 hands.

Johnson City.—The address of H. A. Clark, reported last week as to build a 50-barrel roller flour mill, is Pike, N. Y. He will commence work in September.

Knoxville.—The Knoxville Real Estate Co. are negotiating for the location of several manufacturing establishments.

Lebanon.—A saw mill is being erected by John W. Bennett.

Lebanon.—Stephen Bredin, of Franklin, Pa., is leasing oil and gas lands.

Memphis.—A. J. McWhirter, 40 Madison street, will organize a company to use and manufacture gas economizers.

Memphis.—The Bluff City Brick & Manufacturing Co., previously reported, has been organized with N. W. Brown as president; M. C. Pearce, vice-president; M. L. Bacon, secretary, and L. H. Stewart, general manager.

Morristown.—Mathis & Co. have bought some new machinery for their brick-yard.

Murfreesboro.—N. C. Collier will receive bids for building a church until May 30.

Nashville.—The Alexandria Iron Co., lately reported as organized and to build malleable iron works, will locate their plant at West Nashville. Work will be commenced shortly.

Nashville.—The West End Methodist Episcopal Church will erect a church to cost \$30,000. The Lanier Mill Co. will build a \$9,000 warehouse.

Nashville.—The Hermitage Hosiery Co. will rebuild their factory reported in this issue as burned.

Nashville.—The Robin Jones Creamery & Dairy Co. will rebuild their creamery reported in this issue as burned.

Nashville.—The American Paper Box Co. will rebuild their factory reported in this issue as burned.

Nashville.—B. S. Rhea & Son will erect a \$25,000 building.

Nashville.—A 50-ton ice factory is being erected by the Excelsior Ice Co. The capital stock of the company is \$100,000. W. H. Howe is manager.

Nashville.—The Nashville Land Improvement Co. are negotiating for the removal of several manufacturing plants from the North to West Nashville.

Nashville.—James M. Quarles, Joseph Engles, David M. Quarles, J. H. Engles, W. J. Engles, William T. Turley and A. B. Tavel have incorporated the Laverne Mining & Manufacturing Co.

Nashville.—The Nashville Cotton Mills will build an additional mill of 5,000 spindles capacity.

Nashville.—Ireland & Phillips will build a \$7,000 dwelling; A. L. Demoss will remodel dwelling at cost of \$6,000, and Wm Moore will build \$5,000 dwelling.

South Pittsburg.—Mr. Hughes will enlarge his saw mill.

(CONTINUED ON PAGE 582.)



### A Combined Crusher and Pulverizer.

Mechanical skill has devised from time to time various means for crushing and pulverizing ores and other hard and refractory material. Stamps, buhr stones and rolls are ancient and approved methods, and the ma-

ized, and the grinding, which otherwise would be upon the mill, is transferred to the material, which is at once reduced to powder. The mill does not grind the material, but simply furnishes the power that compels the rocks to crush each other. The cast iron screen shown in figure 2, in which both revolving heads are drawn back, is compos-

through this screen into the bin below. When necessary to reduce the material to a greater fineness than the screen outlets allow, the coarser part is reconveyed to the mill by an elevator, that which is sufficiently fine being first removed by the usual apparatus adopted in milling. A suction blower causes the air to draw strongly into the mill,

formation is made inside the head of a conical, cup-like lining, figure 3, formed by the caking within the head of the material being ground. This lining is of great importance, as it is a complete shield to these parts of the machine. With the exception of the edges of the bushings, the entire interior of the machine is protected by the rock itself. The elementary parts of the machine are clearly shown in Fig. 5. The end of each shaft carries the head holding the bushing, which projects a little way into the case. Within each bushing is shown the hollow stone cone formed by the packing of the ground rock. The hopper is shown filled with rocks that drop into the case between the heads. The arrows on the shafts indicate the general direction in which the rocks are thrown from the heads. The flying rocks are sure to collide with those moving in the opposite direction, as their journey is made through an atmosphere of the same material. These collisions result in rapid and perfect crushing, and the rocks expend their force upon each other before reaching the iron work of the machine. The iron screen is of small diameter, and the ground rock is let out at once. This is great economy; for to strike a rock after it is once reduced to the fineness desired is a waste of power, and in metal-bearing rock to leave a particle of free metal in the machine to be pounded over and over again and worn away results in great loss. Some idea of the capacity of these mills may be obtained from the fact that a 20-inch mill will discharge from 16 to 20 tons of product per hour. No injury occurs to the mill from pieces of broken drills or wedges or pieces of iron

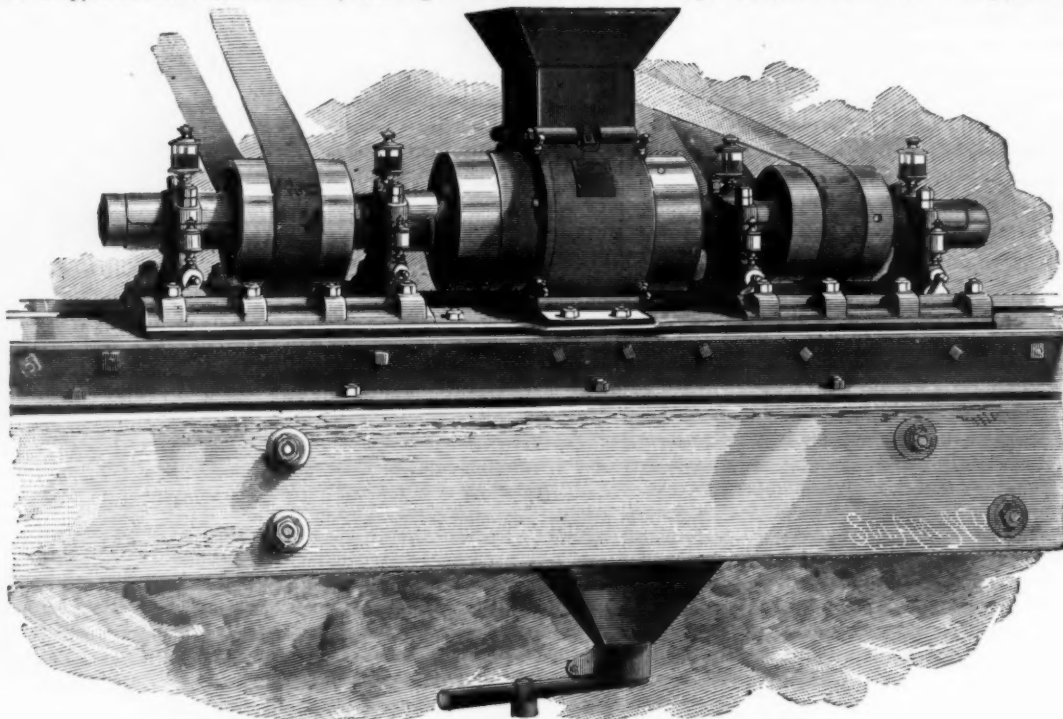


FIG. 1.—THE STURTEVANT COMBINED CRUSHER AND PULVERIZER.

chines heretofore constructed have usually adopted some one or more of these forms. In the old methods the process of grinding is comparatively slow and necessarily expensive, owing to wear on the machines. The Sturtevant mill, however, (cuts of which are shown here), is claimed to be a complete departure from all other methods. This mill is a crusher and pulverizer combined, and making the material do its own work is one of the novel features of the machine. It can be readily understood that if, by means of any mechanical contrivance, the rock can be made to act upon and pulverize itself without being ground between faces of metal, the wear on the machine would be reduced to a minimum, and this being the case, it would naturally follow that the power expended would be greatly reduced, while the amount of work would be greatly increased. These desirable results are accomplished by the Sturtevant mill, and in order that it may be better understood, we present the detailed description below.

The mill is composed of two cylindrical heads or cups arranged upon opposite sides of a case, (into which they slightly project,) facing each other, and are made to revolve in opposite directions. The material being fed into the interior of the case through the opening at the top is retained and prevent-

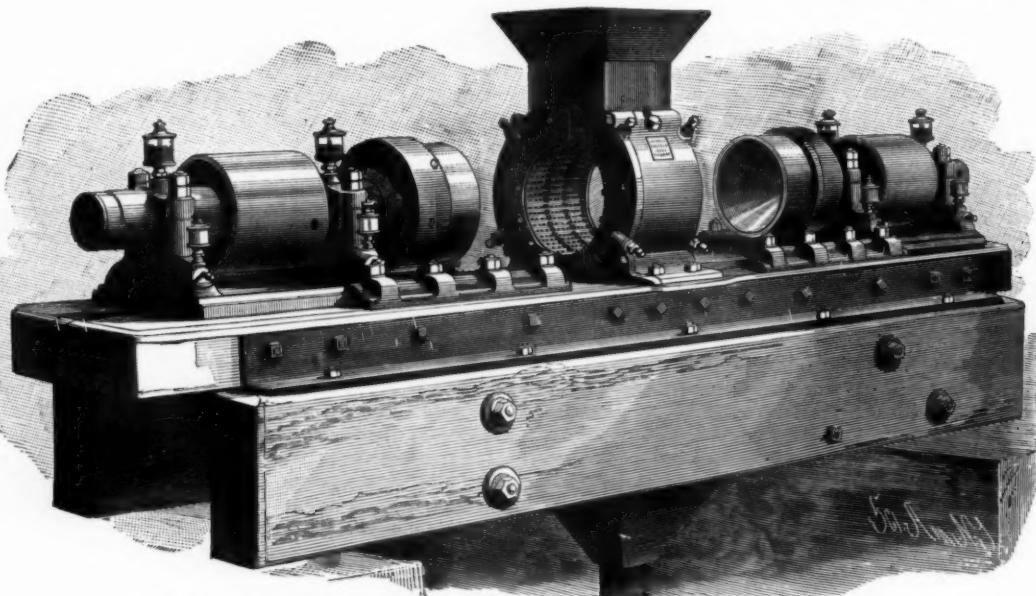


FIG. 2.—THE STURTEVANT MILL, WITH HEADS DRAWN BACK TO SHOW THE INTERIOR.

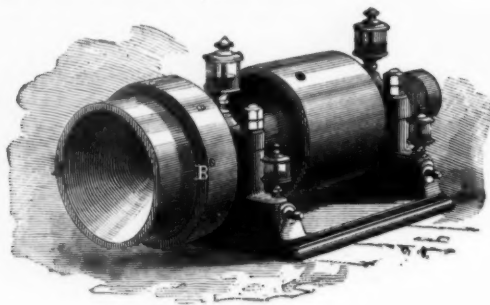


FIG. 3.—THE REVOLVING HEAD.



FIG. 4.—THE REVOLVING HEAD TAKEN APART.

ed from dropping below the revolving heads or cups by the cast iron screen, and entering (as it must) the heads or cups in revolution, is immediately thrown out again from each cup in opposite directions with such tremendous force that the rocks from one cup in collision with the rocks thrown oppositely from the other cup are crushed and pulver-

ized of small sections, which can be easily replaced when required. The wear upon this screen is slight, as it is always protected from the action of the rocks thrown from the heads or cups by a cushion of interposing material composed of the rocks which always fill the case and cover the screens. The material, as fast as ground, passes

and prevents the escape of dust. The revolving heads shown with the parts together in figure 3 and separate in figure 4 are composed of two parts, one of which (A), a simple hard iron cylinder, called the bushing, is removable, and when worn can be easily taken out and replaced. As soon as the mill is put in operation, a curious

that may be mixed with the material. They all meet a common fate. The Sturtevant mill is of great capacity, whether grinding coarse or fine; but its chief merit is that it does not wear out. It is claimed to be not only a good machine theoretically, but has been in use sufficiently long to demonstrate fully its merits practically, and the demand is steadily increasing.

Among some of those using these mills on different material may be mentioned the following well-known concerns, all of whom, we are informed, express themselves as well pleased with the results obtained: E. Balbach & Son, Newark, N. J., (copper matte); Oxford Copper & Sulphur Co., Constable Hook, N. J., (ores and mattes); Anaconda Smelting Works, Anaconda, Mont., (copper matte); J. C. Varela, Chihuahua, Mexico, (ores); St. Louis Smelting & Refining Co., St. Louis, Mo., (ores and mattes); Walton & Whann Co., Wilmington, Del., (phosphate rock); Dambmann Bros., Baltimore, Md., (phosphate rock); Etiwan Phosphate Co., Charleston, S. C., (phosphate rock); Bowker Fertilizer Co., Elizabethport, N. J., (phosphate rock); Pacific Guano Co., Woods Holl, Mass., (phosphate rock); Pennsylvania Salt



Manufacturing Co., Philadelphia, Pa., (lime-stone); Standard Fertilizer Co., Duxbury, Mass., (phosphate rock); Hudson River Cement Co., Rondout, N. Y., (cement.) The Sturtevant mill is manufactured by the Sturtevant Mill Co., whose offices are at 89 Mason Building, Boston, Mass.

every variety of rice in every rice growing country, and important improvements have been made from time to time until, the manufacturers say, "the machinery is now offered with the conviction that it is by far the best rice cleaning machinery in the world." This conviction is based upon its

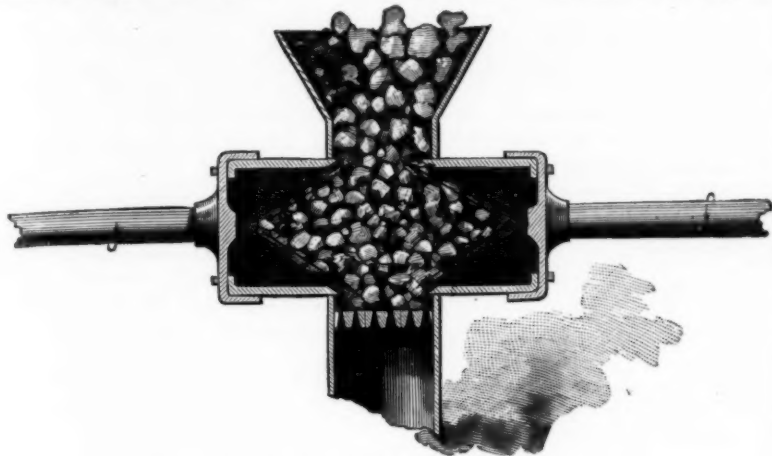


FIG. 5.—ELEMENTARY PARTS OF THE STURTEVANT MILL.

### Rice Machinery.

The accompanying cuts represent a new and improved system of rice milling machinery manufactured only by the Geo. L. Squier Manufacturing Co., Buffalo, New York.

Until the introduction of this improved

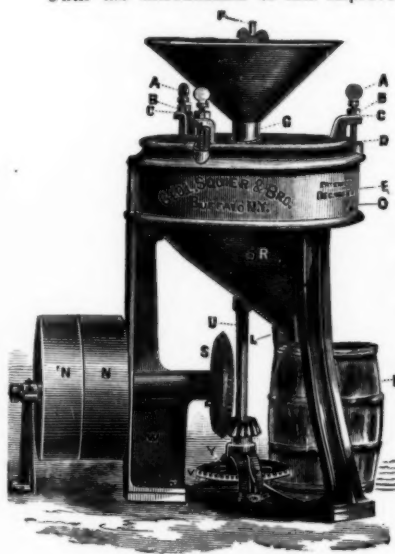


FIG. 1.—RICE MACHINERY.

rice machinery, the common method of fitting rice for use has been by pounding, bruising and breaking it in mortars. Hundreds of thousands of dollars have been expended in experiments and vain endeavors to do away with this wasteful method of cleaning rice, but aside from the system of

actual use in the rice growing countries of the world, and the many testimonials they have received as to its merits.

After years of experience in manufacturing, selling and using this machinery, the manufacturers claim for it the following advantages over any other rice machinery in use:

"1st. A gain of 10 to 20 per cent. in the quantity of the product.

"The New York Shipping and Commercial List of January 8, 1887, stated that 'the average yield of one barrel of 162 pounds of rough rice in the Southern mills is 95 pounds of all grades of clean rice, and that the average yield of one bushel of rough rice is 25 pounds of clean rice.' With the Squier machinery the product of one barrel of 162 pounds of rough rice is 105 to 115 pounds of clean, and one bushel of rough 28 to 32 pounds of clean. They have often produced 115 pounds to the barrel and 32 pounds to the bushel of rough rice. Compute this ratio of gain on the rice crop for a single year, and it will be found to be enormous. In this item alone the machinery will pay for itself in a short time, and a rice miller can better afford to pay double price for this machinery than use any other if it was given to him.

"2d. There is a great gain in the quality of the product.

"By the use of mortars a very large portion of the rice is broken, and a considerable percentage is ground to flour. It comes from the mortars looking, as one rice miller expressed it, 'very sick.' As a result the product is a very little whole or 'head' rice and many grains of broken rice, while a considerable percentage is actually lost.

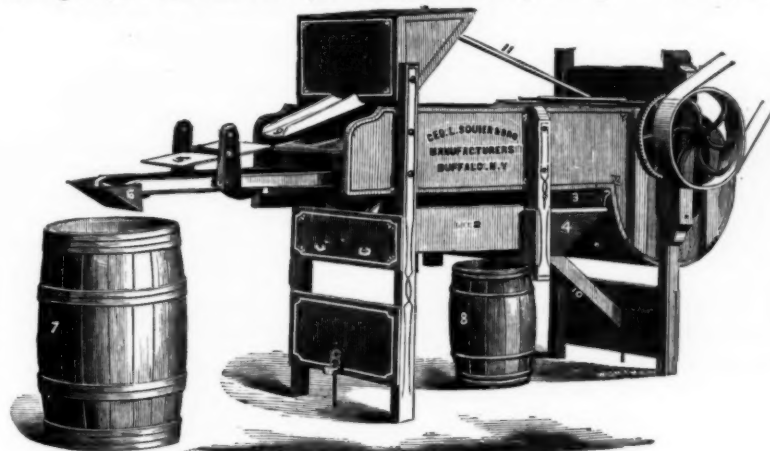


FIG. 2.—RICE MACHINERY.

rice machinery herewith illustrated, there is said to be no method of cleaning rice in which the destructive mortars are not used.

The Geo. L. Squier Manufacturing Co. have spent many thousands of dollars to perfect this machinery. It has been tested on

The machinery illustrated on this page not only saves all the rice, but saves it with a very little breakage, so that a very large portion of the product is whole or 'head' rice. As a consequence, a better price can be realized for the whole product. The meal

also is a very much better article than that produced under the mortar process, for by that process, a large portion of the hulls are ground up in the mortars and go into the meal; while with the Squier machinery there are no ground hulls mixed with the meal, but it is absolutely pure. The meal being the pure inner cuticle, which according to chemists is the most nutritive portion of the grain, ought to make a good article of food. In the quality of the product, this machinery will pay for itself in a short time, but when both quantity and quality of product are taken into consideration, the advantages of this machinery over any other are overwhelming.

"3d. It is the only machinery in the world adapted to the planters' own use.

"The rice grower is in a great degree at the mercy of the rice miller. He must sell his rough rice at the miller's own price, or he must pay the miller his own price for cleaning his rice and fitting it for market. There is absolutely no remedy or relief for him except through the machinery built by the Geo. L. Squier Manufacturing Co., for there is no other machinery in the market adapted to his use. For this reason the large rice millers all oppose this machinery, and do all they can to prevent its introduction among the planters. The mortar system in use in the large rice mills is too expensive for the planters' use, and the millers know this, and have no fear of its general use among planters; but the Squier machinery can be arranged in small and comparatively cheap sets and even in hand sets to suit the wants of any planter. By this machinery the planter can emancipate himself. There is absolutely nothing else in the market to which he can turn for relief.

"4th. It is the only successful machinery in the world which discards the ancient mortar system.

"Many inventors have spent years of time and hundreds of thousands of dollars in endeavors to produce machinery that would do away with the mortars, but the intrinsic difficulties of the case have been too much for them, and they have utterly failed. The Squier separators and scourers have enabled them to make a new departure in rice cleaning and avoid the breakage and waste of the mortars. The mortar system is emphatically the system of the dark ages, while the Squier system is the system of the modern age—the age of railroads, telegraphs, electric lights, etc. It is the only really improved rice machinery for cleaning rice that has ever come into use."

The Geo. L. Squier Manufacturing Co. have recently issued a new rice catalogue, which they will send to any one who may wish to know more about their rice machinery.

## MINING NOTES.

By T. K. BRUNER, Raleigh, N. C.

### HEMBY MINE.

The Hemby mine, in Union county has resumed operations after a two months rest. There are a number of veins on the tract, about sixty-three acres, which is so shaped as to allow considerable length of vein on so limited an area.

The mine is now being worked by a Northern company, with Mr. G. T. Raymond as manager. It has been operated for 12 or 14 months almost continuously. They have a rather troublesome ore to work, but it seems they turn out considerable gold. The company has spent about \$15,000 in the development of the property. They have a good ten-stamp mill, engine, pump, hoister, &c. The work is in all probability on too small a scale to do entire justice to the property.

### HOWIE MINE.

The Howie mine, also in Union county, has recently been unwatered for the purpose of closely examining the supply of ore with a view to permanent work. The water is

being kept in fork, and the mine is producing some fine gold ore from the "Bull Face" shaft, which is 175 feet deep.

### MECKLENBURG COUNTY.

There is not as much activity as usual around Charlotte in mining circles, yet considerable is being accomplished.

The stamp mill at the Todd mine is the only one going, and it is said they have made several very successful runs.

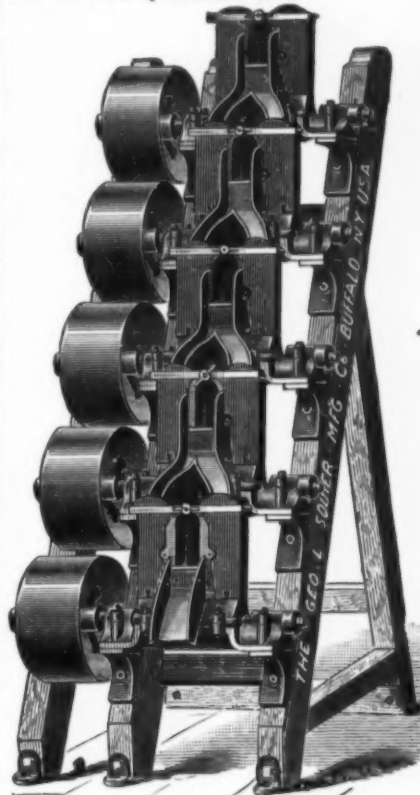


FIG. 3.—RICE MACHINERY.

The Rudisill is being operated by small parties of tributaries, pending negotiations for a sale, and the returns are reported larger than might be expected from such small operations.

The St. Catharine is being developed; the ore bodies exposed are larger than ever before.



FIG. 4.—RICE MACHINERY.

fore, but the ore is not of a character to amalgamate well.

The Henderson and Paint mines are only being prospected; both have good bodies of ore. The same may be said of the Dunn and the Ray mines, at both of which there is a large amount of material accessible.

### HOOVER HILL.

Work at the Hoover Hill mine, in Randolph county, which was a regular producer

for several years, was abandoned a month ago. There is at present no probability of reviving the work.

#### CATAWBA MINE.

The Catawba mine, in Gaston county, is now being worked at a depth of 150 feet, at which depth very large bodies of ore have been encountered; it is said that regular milling work will be commenced at once.

#### MOORE COUNTY.

In Moore county considerable petty work is being done. The special shipments of gold by merchants, bought from the miners, is said to be larger than for four or five years past. Some of this gold probably comes from the Burns, and some from the Cagle mine; the rest is from various sources in the county. Mining there seems, from this fact, to be in a more healthy condition than for several years.

#### SOUTH CAROLINA.

The Dixie mine is in Lancaster county, but near the Union county, N. C., line. They will start their stamp mill next week. The prospect for successful mining is very promising. Mr. H. G. Hotchkiss is on the property in the dual capacity of superintendent and part owner.

Increased production is reported from the Haile and Brewer mines.

#### GEORGIA.

No changes of importance have been made in the condition of mining in Georgia. The work seems to be progressing uninterruptedly in the gold regions of the State.

The Santee mine in White county; the Barlow, Ralston and Gordon mines in Dahlonega county; the Kin-moi in Dawson county, and the Franklin and McDonald mines in Cherokee county, are all at their usual work and with customary results. The same may be remarked of J. B. Smith's mine in McDuffee county.

### Roller Corn Meal Mill.

PILOT POINT, TEXAS, May 12, 1887.

*Editor Manufacturers' Record:*

We are now placing roller corn meal machinery, and expect to be running very soon. Are using the Case short system.

MAFFITT & HARRISON.

BARTOW, FLA., May 13, 1887.

*Editor Manufacturers' Record:*

We have received the contract of building the Polk county jail outside of the cells and frames, which will be put in by the Chicago Globe Iron Works. Our contract is for brick work, carpenter, plastering, plumbing, etc., at a cost of \$10,000. We will commence soon. THOMPSON & CO.

### To Build a Street Railroad.

MONTGOMERY, ALA., May 11, 1887.

*Editor Manufacturers' Record:*

A street railway will be built at Decatur, Ala., during the next 90 days, under the charge of A. H. Howland and associates. Correspondence solicited. W. T. ELLIS, Jr.

### To Erect a Cotton Compress.

MACON, GA., May 10, 1887.

*Editor Manufacturers' Record:*

The Central R. R. & Banking Co., of Ga., will erect a \$75,000 compress in Macon, and will have it ready for this year's crop. This makes two first-class compresses at this point. Ground was broken yesterday for an immense potash factory to be called the Eureka Potash Co., by Messrs. Tom Troy and A. R. Tinsley. The contract on company now have 500 men at work on the Georgia Southern & Florida Railroad, and in 30 days the entire line will be under contract. There are so many new railroads in the course of construction in Georgia and Florida that good dividends could be expected from a factory to build cars. It would pay some of your Northern car works to investigate. I will be glad to answer all enquiries. W. W. COLLINS.

[CONTINUED FROM PAGE 579.]

South Pittsburg.—The Tennessee Coal, Iron & Railroad Co. will blow out and re-line one of their furnaces.

South Pittsburg.—W. M. Brown and F. P. Clute are organizing a company to erect the ice factory reported last week. They also contemplate erecting the steam laundry.

Tampico.—J. W. Briscoe & Co. have started a small coffin factory.

#### TEXAS.

Albany.—It is reported that the Houston & Texas Central Railroad Co. (office, Houston) will extend their road north from Albany.

Abilene.—The Abilene City Land & Improvement Co. has been organized, capital stock \$25,000.

Brownwood.—9,000 acres of land has been leased to Pittsburgh parties who will bore for oil. T. E. Smith can probably give information.

Dallas.—J. C. Nunnally, J. E. Schneider, Alexander Sanger, Jacob Rauch, R. V. Tomkins and T. F. McEnnis have chartered the Nunnally Gold & Silver Mining Co., capital stock \$500,000.

Dallas.—The Catholics will build a cathedral to cost not less than \$100,000.

Dallas.—New pumping machinery is being put in at the Browder Springs water works.

Dallas.—The North Dallas Street Railway Co. contemplate running their cars by electricity.

Dallas.—E. M. Powell and Theodore Mosher contemplate spending \$25,000 in building a foundry, machine shop, &c.

Dallas.—Simpson & Clark contemplate building a system of water works.

Denison.—The Denison Land & Improvement Co., capital stock \$600,000, has been organized with P. E. Fairbanks as president, T. B. Hanna, vice-president, and W. M. Mick, secretary. The object of the company is to buy and sell land, and build railroads, mills, factories, &c.

Dublin.—A stock company has been organized with a capital of \$3,000 to supply Dublin with artesian water.

El Paso.—The capital stock of the Union Powder Co., lately reported as incorporated, is \$200,000. J. J. E. Lindberg is president, Francis Parker, vice-president, L. H. Davis, secretary and treasurer, and Samuel L. Carter, superintendent. A factory is now being erected.

Fort Worth.—The Texas Natural Gas Co. has been formed by Thomas Roche, W. S. Pendleton, T. W. Powell, M. C. Hurley and W. T. Terris.

Fort Worth.—The Fort Worth City Co., capital stock \$500,000, has been incorporated by J. P. Smith and others.

Fort Worth.—A meeting of citizens was recently held to consider a proposition to establish a cotton and woolen factory. C. C. Cummings can probably give information.

Galveston.—The Brush Electric Light & Power Co. have contracted for the boring of an artesian well.

Galveston.—The Gulf, Colorado & Santa Fe Railroad are reported as contemplating sinking another artesian well.

Greenville.—The Edison Electric Light Co. are negotiating for the erection of an electric light plant.

Honey Grove.—A proposition has been made to erect an electric light plant.

Laredo.—Albert McLane and Thos. Dodd contemplate building a street railroad, if the right of way is granted.

Marfa.—It is stated that H. B. Chaffin & Co., of New York, will erect reduction works at the mines of Wright & Cattin, in Presidio county.

Marshall.—The Texas & Pacific Railroad Co. (office, Dallas) will build a wood-working shop.

McKinney.—Deware & Marley will erect an ice factory if water can be obtained.

San Angelo.—The Episcopalians will build a church.

San Antonio.—J. M. Emerson will build two houses to cost \$9,000.

Waco.—Ed. Rotan and others contemplate the erection of a Merchants Exchange building to cost about \$25,000.

#### VIRGINIA.

Amherst.—There is talk of a tobacco factory and a canning factory being started.

Columbia.—Mr. Sickles will develop an iron ore mine 3 miles from Columbia.

Columbia.—The Tagus gold mine will be developed by Mr. Loomis.

Danville.—J. T. Morris & Co. have started a shoe factory.

Liberty.—The Bedford Spoke & Iron Manufacturing Co. are cleaning up their works, and will put them in operation. They will add the manufacturing of excelsior.

Milnes.—The Shenandoah Iron Co. are removing their iron foundry to Milnes and are enlarging it.

Portsmouth.—The company to erect the electric light plant previously reported, will soon be formed. The Portsmouth Gas Co. can give particulars.

Richmond.—Of the bills previously reported as introduced in the legislature so far those to incorporate the Bermuda Hundreds Construction Co.; the Dinwiddie & Brunswick Lumber & Transportation Co.; the Byrd Creek Iron Co.; the Chowan & Southern Railroad Co.; the Mineral Railroad Co.; the Mount Pony Granite & Railroad Co.; the Portsmouth Street Railroad Co.; the Rockbridge Co.; the New River Steamboat Co., and the Round Mountain Mining & Manufacturing Co. have become laws.

Richmond.—Bills have been introduced in the Virginia legislature to incorporate the Damascus Enterprise Co., of Washington county; the Marion Land Agency & Improvement Co.; the Chesapeake Street Railway Co.; the Bristol Coal & Iron Co.; the Warm Springs Valley Improvement Co.; the Richmond & West Point Land Navigation & Improvement Co.; the Danville & Seaboard Railway Co.; the Irish Creek Co.; the Mainland Agency & Improvement Co.; the Walkerton & Mataponi Bridge Co., and the Chesapeake, Richmond & Lynchburg Railroad Co., with Lewis H. Blair, E. E. Meredith, J. Singleton Diggs, C. V. Winfree, B. Ford and others as incorporators. The capital is to be not less than \$100,000 nor more than \$5,000,000.

Rustburg.—Willis I. Cannada will start a canning factory.

Salem.—John Siler is developing a coal mine 2 miles from Salem.

Staunton.—O. K. Lapham & Co. will erect bark extract works with a daily capacity of 60 barrels of extract. 50 hands or more will be employed.

Wytheville.—The Wytheville Woolen Mills Co. has been chartered by H. G. Wadley, John W. Robinson, G. S. Bruce, V. C. Huff and William H. Spiller. The capital stock is to be not less than \$25,000 nor more than \$250,000.

Wytheville.—S. R. Huffard & Co. have reopened their brick-yard.

#### WEST VIRGINIA.

Barnsville (P. O. Fairmont).—The Barnsville Manufacturing Co. will rebuild their woolen mill burned last year.

Harper's Ferry.—Thos. H. Savery and others, of Wilmington, Del., previously reported as having organized the Harper's Ferry Paper Co. to build a paper mill and the Shenandoah Pulp Co. to build a pulp mill, are now at work on the foundation of the large pulp mill.

Wheeling.—Martin V. Smith, of Pittsburgh, Pa., and George I. Garrison, Alfred Caldwell, John R. Miller and George R. Baird, Jr., have incorporated the National

Crematory Co. The capital stock is not to exceed \$500,000.

Ironton, Ohio.—W. H. Peters contemplates moving his stove foundry to some point in the South.

#### BURNED.

Baker, Texas.—The saw mill of A. W. Morris; loss \$50,000.

Baltimore, Md.—The furniture factory of Siehler & Hebrank damaged by fire.

Curtis, Ark.—The saw mill of L. L. Reeder.

Dawson, Ga.—The steam saw mill of B. H. Hood, 3 miles from Dawson.

Durham, N. C.—The plug tobacco factory of Corbett, Patton & Co.; loss \$16,000.

Germantown, Tenn.—The saw and grist mill and gin of Kimbro & Trigg; loss \$5,000.

Helena, Ark.—The gin of John E. Barbee.

Jacksonville, Fla.—The Park Theatre; loss \$15,000. Will probably be rebuilt.

Madisonville, Texas.—James Connor's gin and mill; loss \$2,000.

Martinsville, Miss.—The gin of W. J. Rea, near Martinsville.

Nashville, Tenn.—The Hermitage Hosiery Co's factory. Will rebuild.

Nashville, Tenn.—The creamery of the Robin Jones Creamery & Dairy Co.; loss \$6,000. Will be rebuilt.

Nashville, Tenn.—The factory of the American Paper Box Co.; loss \$25,000. Will be rebuilt.

Richmond, Va.—The mill of the Richmond Paper Manufacturing Co. damaged by a boiler explosion.

Stewart County, Ga.—The gin of J. H. Lowe.

### Building a Furnace.

GADSDEN, ALA., May 10, 1887.

*Editor Manufacturers' Record:*

Work commenced on a furnace six weeks since. Everything under contract.

GADSDEN ALABAMA FURNACE CO.

### Will Erect Electric Light Plant.

GREENSBORO, N. C., May 12, 1887.

*Editor Manufacturers' Record:*

The Thomson-Houston Electric Light Co. will begin operations in this city on or about June 1st. C. F. THOMPSON.

### Will Manufacture Terra Cotta Lumber.

LOUISVILLE, KY., May 14, 1887.

*Editor Manufacturers' Record:*

We intend to commence the manufacture of terra cotta lumber about the 1st of July, which will be as soon as we can get our machine. LOUISVILLE BRICK CO.

FLINTSTONE, MD., May 12, 1887.

*Editor Manufacturers' Record:*

We are organizing a company of men to prospect for silver at a certain point here. The prospects are good. The name of the company is the Flintstone Mining Co. J. ASH.

NASHVILLE, TENN., May 13, 1887.

*Editor Manufacturers' Record:*

Company is organized, but plan of operation not yet agreed upon. It will be called the Grand River Iron, Coal & R. R. Co. JOHN G. HOUSTON.

MEMPHIS, TENN., May 13, 1887.

*Editor Manufacturers' Record:*

The First Methodist Church is just beginning a new church on corner of Second and Poplar streets. Jacob Snyder, of Akron, O., is the architect. R. H. MAHON.



**Erecting a Tool Factory.**

CHATTANOOGA, TENN., May 12, 1887.

*Editor Manufacturers' Record:*

We have begun the erection of a plant for the manufacture of Jacob's neck yokes, Champion hoes, Howes' mallets, drain shovels, rakes and agricultural implements at this place. The company is incorporated as the Chattanooga Tool Co., with a capital stock of \$50,000. Expect to complete works and begin operations inside of 60 days.

W. G. McADOO, JR., Pres.

BIRMINGHAM, ALA., May 13, 1887.

*Editor Manufacturers' Record:*

We are planning for a 3-story and basement brick building, 100x100 feet, for Messrs. Hewlett, Simms & Co.; cost about \$30,000. Will break ground on the work about the 20th of May. The building will be an European-plan hotel. Also 3-story and basement brick, stone and terra cotta building, 52x120 feet, in Anniston, Ala., for Constantine & Terry; to begin about May 25.

CHISHOLM &amp; GREEN, Architects.

**The Anniston Gas Works.**

ROME, GA., May 14, 1887.

*Editor Manufacturers' Record:*

We have orders to make out plans and specifications in detail for gas works at Anniston, Ala., but have not yet entered with a contract to build them. We expect to do so in a few days.

J. J. CHILDS.

**Water Works and Electric Lights for Wytheville.**

WYTHEVILLE, VA., May 14, 1887.

*Editor Manufacturers' Record:*

The vote taken to appropriate \$60,000 for water and electric light stood—for, 275; against, 6. Capt. J. H. Wingate has been appointed engineer in charge of the work. A stock company has been formed, with a capital not exceeding \$250,000, to establish a woolen mill at this place.

BEN W. TERRY.

WASHINGTON, ARK., May 14, 1887.

*Editor Manufacturers' Record:*

I have contracted to build the section of the North & South Louisiana Railway from Gibsland, on the Vicksburg & Shreveport Railway, to Homer, La., taking the stock and bonds of the road for the construction.

J. D. BEARDSLEY.

**To Build Water Works.**

MCKINNEY, TEXAS, May 12, 1887.

*Editor Manufacturers' Record:*

It is a fact that we have incorporated the McKinney Water Supply Association, of McKinney, Texas; capital stock \$40,000. We will erect stand-pipe, etc.

J. L. DOGGETT.

LAURENS, S. C., May 13, 1887.

*Editor Manufacturers' Record:*

S. D. Garlington may start a brick yard in Laurens, S. C.

P.

SALISBURY, MD., May 16, 1887.

*Editor Manufacturers' Record:*

The Methodists will build a stone church here. Port Deposit stone will be used.

W. H. JACKSON.

ISBELL, ALA., May 14, 1887.

*Editor Manufacturers' Record:*

We are putting in shingle and lathe machinery. Will start it up to-morrow.

ROBINSON &amp; ALLEN.

DUNN, N. C., May 16, 1887.

*Editor Manufacturers' Record:*

I am just completing my buggy shops here, 30x140 feet.

A. B. GOODWIN.

**Will Build a Stone Mill.**

ISBELL, ALA., May 13, 1887.

*Editor Manufacturers' Record:*

We have just completed two miles of railroad to our quarries, and are preparing to build stone mill and will have it in operation in about two months.

T. L. FOSSICK, JR.

**Mineral Lands to be Developed.**

COVINGTON, KY., May 13, 1887.

*Editor Manufacturers' Record:*

7,000 acres of fine mineral land has been sold by me for clients to the American Association, limited, of London, Eng. That association is now proceeding to develop that land, and are obtaining right of way from Cumberland Gap. The land lies about the Cumberland Gap, and this association of English capitalists will invest thousands of dollars in iron works and railways.

A. Y. SIMRALL.

**To Build Water Works.**

CHATTANOOGA, TENN., May 14, 1887.

*Editor Manufacturers' Record:*

The North Chattanooga Water Works Co., propose to build water works to supply the new city to be built upon the land of the Chattanooga Land, Coal, Iron & Railway Co. Mr. Adams, president, will probably be made president of the water company.

W. T. BURKAM.

NICHOLASVILLE, KY., May 11, 1887.

*Editor Manufacturers' Record:*

The trustees of the Jessamine Female Institute are about to erect a \$10,000 house, including boarding department for 75 girls and chapel for 150 pupils; all of which are to be on the most improved plan. H. L. Rowe, of Lexington, Ky., is the architect. The contract for this building will be let about June 1, 1887: to be built of brick, which can be burned near the property at small cost.

CHAS. MANN, Sec'y.

SUTALLEE, GA., May 11, 1887.

*Editor Manufacturers' Record:*

I have erected a shingle mill.

JOHN MAYHUGH.

**Receiving Bids for Building Railroad.**

MACON, GA., May 11, 1887.

*Editor Manufacturers' Record:*

On June 4 the Macon Construction Company, with a capital of \$500,000, will organize for the purpose of building the road from this point to Gainesville, Fla. Pending the perfection of charter for the Construction Company, I am authorized to receive bids, which will be opened and contract awarded on June 6.

JEFF. LANE.

**Cotton Factory Contemplated**

UNION, S. C., May 13, 1887.

*Editor Manufacturers' Record:*

The erection of a cotton mill at this place is under contemplation, but nothing definite has been accomplished.

J. C. HUNTER.

**Will Develop a Manganese Mine.**

CEDARTOWN, GA., May 11, 1887.

*Editor Manufacturers' Record:*

We will develop one of the finest manganese lodes in the South, and have in mining order within 60 days.

T. J. NICHOLL.

**To Manufacture Excelsior.**

ATLANTA, GA., May 12, 1887.

*Editor Manufacturers' Record:*

We have formed a company of \$20,000, with patent right on new invention for making excelsior for the States of Georgia, Alabama and Florida.

J. A. ADAMS AND S. K. P. CARLTON.

**Cotton Factory Repaired.**

MONBO, N. C., May 10, 1887.

*Editor Manufacturers' Record:*

The Monbo Manufacturing Co. has been organized under the general corporation laws of North Carolina. The capital stock, \$37,000, has been fully paid up by C. L. Turner, W. D. Turner, Samuel Turner, W. W. Turner and James Willson. Turner Bros. are succeeded by the foregoing. The officers are: W. D. Turner, president, Statesville, N. C.; C. L. Turner, secretary and treasurer, Monbo, N. C. Long Island Cotton Mill, which has been so long standing, has been repaired and will in a few days be operating under this the same management as Monbo Plaid Mills. It is about one mile up river Catawba from here, Monbo.

C. L. T.

ATLANTA, GA., May 10, 1887.

*Editor Manufacturers' Record:*

Under the auspices of the Atlanta Manufacturers' Association, the Atlanta Manufacturers' Improvement Company has been chartered and organized with a paid up capital of \$150,000, and which may be increased under the charter, to \$500,000. Officers elected: W. A. Hemphill, president; Geo. W. Adair, vice-president and general manager; H. B. Tompkins, attorney, and E. Hulbert, secretary. The company has purchased 200 acres of land adjoining the city, on the line of the Central Railway suitable for manufacturing purposes, and have donated 10 acres to the Southern Cotton Oil Company, who are now erecting their buildings on the company's property. The Improvement Company will extend every facility to parties desiring to locate manufactories on their lands.

E. HULBERT, Secretary.

**New Machinery Added.**

HENDERSON, KY., May 9, 1887.

*Editor Manufacturers' Record:*

We have added to our mill since January 54 looms, 2,400 spindles, and 8 cards.

HENDERSON COTTON MILLS.

PAUL J. MARRE, Treas.

CHARLESTON, S. C., May 10, 1887.

*Editor Manufacturers' Record:*

We have recently put up a complete coffee roasting establishment with all the latest improved appliances, and have it now in complete working condition.

WELSH &amp; EASON.

**Laundry Machinery Wanted.**

WINCHESTER, KY., May 10, 1887.

*Editor Manufacturers' Record:*

We have not bought our laundry machinery as yet. We are now putting up our building for the laundry, 20x68 feet, alongside of our planing mills, as we have plenty of power for both. Want to buy our laundry machinery in course of two or three weeks if we can find where to buy the best.

MARTIN &amp; BRO.

**Will Increase Capacity.**

CALERA, ALA., May 12, 1887.

*Editor Manufacturers' Record:*

Brick works are now in operation with a present capacity of 30,000 per day, to be increased in two weeks to 90,000 per day or 180,000 in 24 hours. Electric plant already contracted for, and works will be run night and day. Firm name is Rogers & Reynolds. Clay excellent.

ROGERS &amp; REYNOLDS.

**Another Furnace for Birmingham.**

BIRMINGHAM, ALA., May 11, 1887.

*Editor Manufacturers' Record:*

Arrangements are being perfected now for the erection of a 100-ton furnace at East Birmingham.

GEO. C. KELLEY.

**Ice Machinery Wanted.**

TALLADEGA, ALA., May 9, 1887.

*Editor Manufacturers' Record:*

I would be pleased to receive circulars, pamphlets, &c., relating to ice machinery. Will erect ice works and brewery here on property of the Talladega Land & Improvement Co., at an early date.

WILLIS SHAW.

**Cotton Factory to be Rebuilt.**

PRATTVILLE, ALA., May 4, 1887.

*Editor Manufacturers' Record:*

The Prattville factory was sold on last Monday, and purchased by the Prattville Cotton Mills at \$23,000. This is a new corporation, organized for the purpose and will at once rebuild the factory. It has a capital stock of \$125,000.

Z. ABNEY.

**To Build a \$40,000 Hotel.**

CHATTANOOGA, TENN., May 9, 1887.

*Editor Manufacturers' Record:*

We contemplate erecting and are now preparing the foundation for a hotel at the Point on Lookout Mountain, at the terminus of our incline, 60x250 feet, three stories, with two basements, to cost about \$40,000.

LOOKOUT INCLINE RAILWAY CO.

C. N. WOODWORTH, Secy. and Treas.

**To Extend Water Works.**

ATHENS, GA., May 9, 1887.

*Editor Manufacturers' Record:*

We are immediately going to extend our works and make other alterations, which will cost upon the whole about \$6,000.

JOS. N. DUCHETT, Superintendent.

**To Build Water Works.**

GREENVILLE, MISS., May 10, 1887.

*Editor Manufacturers' Record:*

Contracts entirely favorable and satisfactory to the water works company were closed with the city of Greenville on the 7th inst., and work will begin within 60 days with a view to the early completion of the same.

F. L. BATES.

**New Machinery.**

ROCK SPRINGS, FLA., May 7, 1887.

*Editor Manufacturers' Record:*

I have purchased an interest in the Davis saw mill, and added a large 12x24 engine and am also putting in saw, edger saw, and will put in a good planer in a short time. The firm is Gates, Davis & Co.

JNO. W. GATES.

**Chair Factory.**

SELMA, N. C., May 12, 1887.

*Editor Manufacturers' Record:*

I shall start a chair factory here very soon; have been working at the business on a small scale, but hope soon to enlarge my business.

S. T. PEARCE.

**To Manufacture Brick and Terra Cotta.**

NASHVILLE, TENN., May 11, 1887.

*Editor Manufacturers' Record:*

This company has been organized for the purpose of manufacturing brick and tile, but the tile feature has not yet been fully determined and they are not manufacturing tile yet.

WEST NASHVILLE BRICK,

TILE &amp; TERRA COTTA CO.

HOT SPRINGS, ARK., May 10, 1887.

*Editor Manufacturers' Record:*

The mines are on a big boom. A new gold lead has been found near Cedar Glazes in Montgomery county. The Little Hornet Mining Co. will commence work in 60 days.

J. M. McCOLLUM, General Manager.

**Contracted to Build Two Furnaces.**

PHILADELPHIA, PA., May 13, 1887.

*Editor Manufacturers' Record:*

We have contracted with the Sloss Iron & Steel Co. to build them two 17x75 feet blast furnaces. Each one of these furnaces will be equipped with our improved Gordon-Whitwell-Cowper fire-brick hot blast stover, with the 1,300 horse-power water tube boilers of our improved style. The entire plant will be capable of producing from 225 to 250 tons of iron per day. The same is to be completed within eleven months from date.

GORDON, STROBEL & LAUREAU, Limited,  
VICTOR O. STROBEL, Treas.

**To Build a Bessemer Steel Plant.**

ASHLAND, KY., May 10, 1887.

*Editor Manufacturers' Record:*

The stockholders, at their annual meeting on April 27, decided to build a Bessemer plant. The capacity is to be determined hereafter. No contract yet made.

NORTON IRON WORKS.

**To Enlarge Zinc Works.**

AUSTINVILLE, (P. O., MAX MEADOWS,) May 11, 1887.

*Editor Manufacturers' Record:*

We propose the enlarging of our works this summer by the erection of two blocks of Spelter furnaces, with capacity of two tons metal per day.

WYTHE LEAD & ZINC MINE CO.,  
J. C. RAPER, Agent.

**Information Wanted.**

CHATTANOOGA, TENN., May 9, 1887.

*Editor Manufacturers' Record:*

I want the names and addresses of parties having bi-product ovens outside of Mr. Pierce's system.

W. S. BRAUFF.

**Received Contract to Build Bridges.**

ATLANTA, GA., May 9, 1887.

*Editor Manufacturers' Record:*

The contract for the bridges on the A. & C. Railroad have been awarded us; also the contract for two span iron bridges on Rome & Decatur Railroad, in all amounting to 460 tons.

ATLANTA BRIDGE &amp; AXLE CO.

**To Build Machine Shops.**

LOUISVILLE, KY., May 10, 1887.

*Editor Manufacturers' Record:*

The Louisville Southern Railroad will build shops in Louisville during the summer and fall costing \$50,000. Construction will commence in early summer.

BENNETT H. YOUNG.

**Cotton Factory Projected.**

YORK STATION, ALA., May 10, 1887.

*Editor Manufacturers' Record:*

We are trying to raise the money to build a \$50,000 cotton factory. Think we will succeed.

R. B. HIGHTOWER.

**Receiving Bids for Building Bridge.**

HUNTERSVILLE, W. VA., May 10, 1887.

*Editor Manufacturers' Record:*

I am receiving bids for the construction of a bridge across Knapp's creek at this point. Will continue to receive till June 1.

C. F. MOORE.

**Machinery Wanted.**

MACON, GA., May 10, 1887.

*Editor Manufacturers' Record:*

I shall need much machinery to work up 75,000 or 100,000 cords of valuable oak, hickory, beach, etc., into various merchandise.

ULYSSES M. GUNN.

**Water Works to be Built.**

MCKINNEY, TEXAS, May 10, 1887.

*Editor Manufacturers' Record:*

A company has been formed to build water works. There has also been a charter obtained for a mill and elevator company, capital stock \$25,000; also an ice factory is to be erected by Deware & Marly, if water can be obtained. They have bought ground and are digging with every prospect of success.

T. T. EMERSON.

**Will Remodel Flour Mill.**

KINGSTON, GA., May 12, 1887.

*Editor Manufacturers' Record:*

We will change our mill to the full roller system. Will let the contract in a few days.

GAINES &amp; LEWIS.

HATTIESBURG, MISS., May 11, 1887.

*Editor Manufacturers' Record:*

We are engaged in manufacturing brick, and hope to turn out 20,000 per day.

ROBINSON &amp; LACEY.

SAN ANTONIO, TEXAS, May 9, 1887.

*Editor Manufacturers' Record:*

The city of San Antonio will build shortly a city hall and jail combined.

BRYAN CALLAGHAN.

LONGVIEW, TEXAS, May 9, 1887.

*Editor Manufacturers' Record:*

We are building small machine shop and round-house at Longview; capacity for 75 miles of road. Have out contracts to extend road 16 miles to Carthage in time for fall business. Are changing gauge to standard this month.

GALVESTON, SABINE &amp; ST. LOUIS RY. CO.

**REAL ESTATE IN A Booming Alabama Town FOR SALE.**

Three Hundred Choice Business and Residence Lots in the CITY OF ANNISTON.

This property is the best in the city, and having been bought before the boom, will be sold at prices affording investors a rare opportunity to make certain and handsome profits. Address

F. M. HIGHT, Anniston, Ala.

**O. H. PARKER & CO. Anniston, Ala.**

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**Real Estate, Stocks and Bonds**

ON COMMISSION.

Correspondence solicited. Refer to First National Bank of Anniston. Advantageous Manufacturing Sites Obtained Free.

**B. K. COLLIER & CO. Investment Agents,**

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Refer to THE CORBIN BANKING CO., New  
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COMPLETE OUT-FIT FOR

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Light Sections Rails and Spikes in stock.

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RUFFIN &amp; HAIRSTON, Real Estate Agents, DANVILLE, VA.

**DRAPER-RIDDLE LAND CO. Anniston, Ala.****BUY AND SELL LAND**

On most reasonable terms.

Any information concerning Anniston  
will be cheerfully given.

Stocks and Bonds Bought and Sold on Commission.

**D. W. K. PEACOCK, Real Estate Agent, CARTERSVILLE, GA.**

Minerals a Specialty.

Refers to THE HOWARD BANK, Cartersville, Ga.  
J. W. RANKIN, Atlanta, Ga.

**CHANCERY SALE.**

Under decree of Chancery Court at Jonesboro, Tenn., I will on May 21, 1887, on premises at Telford's Station, on East Tennessee, Virginia & Georgia Railroad, in Washington County, Tenn., sell at Auction without redemption the Lands, Factory, Buildings and Machinery heretofore owned by "Telford Agricultural Manufacturing Company."

About ten acres Land; splendid three-story Factory; fine Water-power; 23 horse-power new iron Turbine Wheel; Foundry; Saw Mill; Planer; iron, wood, spoke and handle Lathes; buff Wheel; emery Stone; press and stove Drills; casting Grinder and Cleaner; jointing, band, cut-off and rip Saws; Beam Machine; Flasks; Follow Boards; Plow, Stove and Hollow-ware Patterns; noiseless Blower; Core Stove; Scales; Vises; Benches; Shafting; Pulleys; Belting, &c. Machinery suitable for making Farming Implements, Plows, Stoves, Spokes, Handles.

Terms.—Ten per cent. on confirmation, balance 12, 18 and 24 months, equal instalments; notes with personal security and lien on property. A. B. BOWMAN, Clerk and Master.

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Dummies for Street Railroads,

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Also, Freight Cars, of all styles, Railroad Spikes, Fish Plates, Bolts, Car Axles, Car Wheels, Trucks, Links, Pins, and other Car Forgings, Bar Iron, Steel Horse Shoes.

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Situation in the office or on the road with a reliable fertilizer or other Manufacturing Company, North or South, needing a man of character and experience, familiar with States from Pennsylvania to Louisiana, and having large and valuable acquaintance. Position as Secretary, Correspondent or Solicitor preferred. Address

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City and Mineral Property a Specialty.

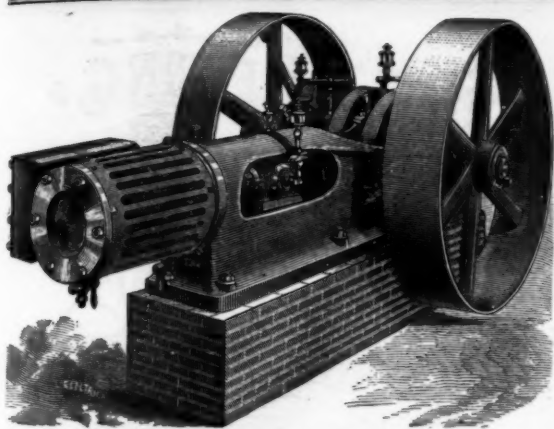
Capital Stock  
\$100,000.

—REFERENCES—  
First National Bank, Anniston, Ala.  
Col. Jno. M. McKleroy, Pres. Anniston City Land Co.

**ANNISTON, ALA.**

— CORRESPONDENCE SOLICITED. —





This Pattern of  
**The Payne Automatic  
ENGINE**

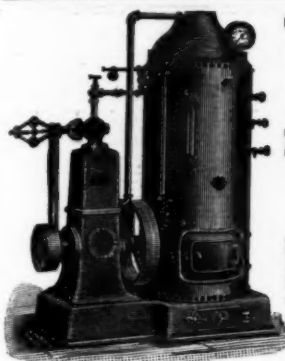
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reliable and economical  
**FOR ELECTRIC  
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EVER DESIGNED.

A full line of Verti-  
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Boilers always in  
stock.

It will pay you to correspond with us before buying.

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107 Liberty St., New York. 10 S. Canal St., Chicago. Baltimore—Morton, Reed & Co.

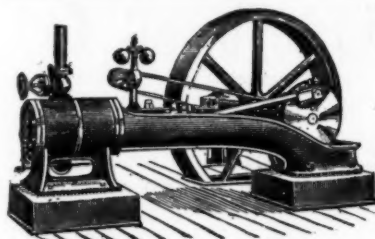


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A New Mechanical Movement.

More Economical after years of use than the Slide-Valve Engine  
WHEN NEW  
THE EXTREME OF SIMPLICITY.

Only eight moving pieces, and but twenty altogether. Not a rotary, but a piston engine using the steam expansively. Cannot be tampered with. No packing against steam. Noiseless. Takes up its own lost motion while running. Self-lubricating—having very large bearing surfaces with brass boxes. You cannot know its worth until you investigate. High-test steel boilers, 2 to 10 horse powers. Send for new circular No. 7. Address,

**CASTLE ENGINE WORKS,**  
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**WRIGHT & ADAMS CO.**  
QUINCY, ILL.  
BUILDERS OF

**Automatic Cut-Off  
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Double Drum Derrick Engines. Single Drum  
Reversing Engines, suitable for Mines  
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Correspondence respectfully solicited.

Catalogue sent on application.

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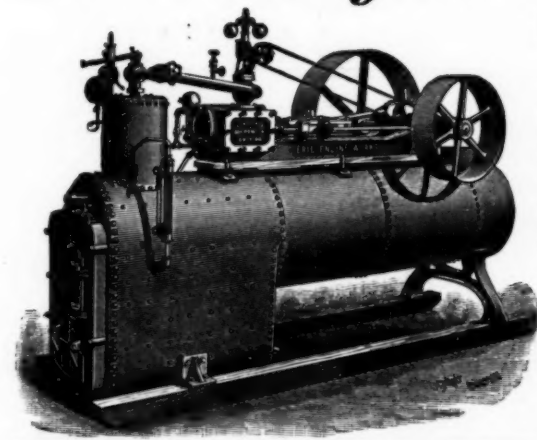
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Stationary,  
Detached,  
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Engines. Boilers.

Send for Catalogue and Prices.



**Chandler & Taylor's STEAM ENGINES**

Self-Contained.



Are Strong, Well-Built and Serviceable.  
Are designed for Heavy and Continuous  
Work.  
May be run at High Speed when desired,  
performing the duties of High Grade  
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And are sold at the prices of ordinary  
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**CHANDLER & TAYLOR,**  
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Castings of every  
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Engineers, Machinists and Boiler Makers,



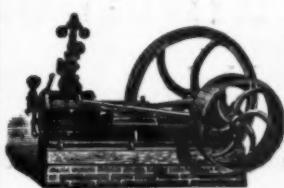
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5 to 500 H. P. Special stock rises 5 to 50 H. P., both Sta-  
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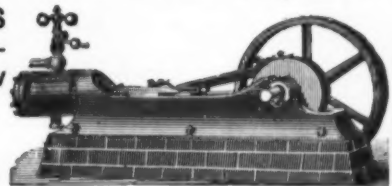
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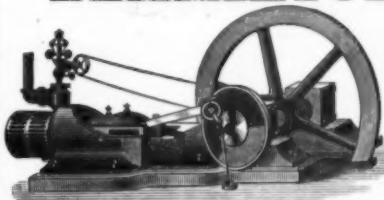
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Economy of Fuel, with increased capacity of Steam  
Power. Like the Siemens Process of Making  
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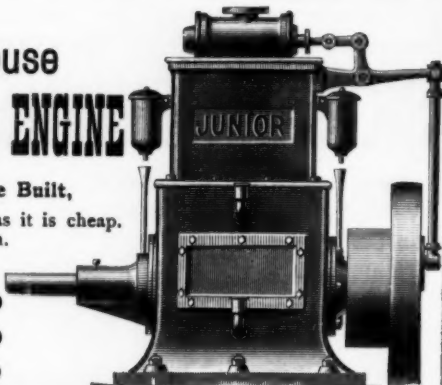
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As the CHEAPEST Engine Built,  
And we guarantee it to be as good as it is cheap.  
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15 H. P. . . .	\$200 00
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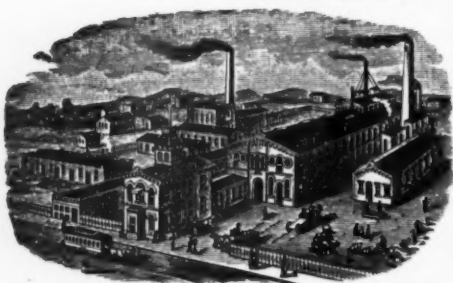
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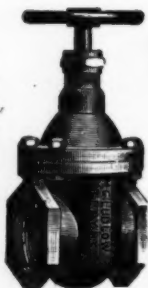
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Double and Single Gate, 1/4 inch to  
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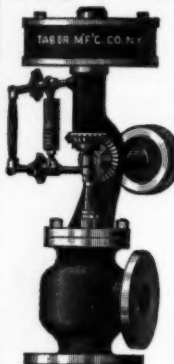
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Perfectly adapted to every type of Stationary and Portable Engine.  
Fitted with speed adjuster, Sawyer's Lever and  
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All Parts Interchangeable.

SEND FOR SPECIAL CIRCULARS AND PRICE LISTS.



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NECESSITY, COMFORT, LUXURY.



Fig. 1.



Fig. 2.



Fig. 3.

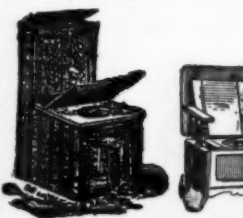


Fig. 4.



Fig. 5.

1. **Sargent's Monarch, Empress and Premier Reclining Chairs.** These Chairs are the best of their class made in the world, having an almost endless variety of positions, made of the best material, and are upholstered to insure perfect rest. They range in price from \$35.00 to \$150.00. We also make a large variety of other styles, including our Favorite Automatic Nos. 65, 85 and 103, which range in price from \$50.00 to \$60.00.

2. **Sargent's Invalid Rolling Chairs.** We represent but two of our numerous styles, which include all kinds, for house or street use, reclining and rigid, cane and upholstered.

3. **Sargent's Solid Comfort Back-Rest and Folding Bed Tray.** Treasures for invalids. Prices of Back-Rest: No. 1, plain, \$4; No. 2, with arms, \$5; No. 3, with arms and head-rest, \$6. Prices of Trays: No. 1, 15x25 inches, \$3; No. 2, 17x28 inches, \$4.

4. **Earth Closets.** Its merits are incontestably established by 16 years' trial. As a sanitary measure as well as a convenience, it should be adopted in every country house.

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 SHEET METAL IN ANY FORM MADE FROM BLACK PAINTED, GALVANIZED OR KALAMEIN IRON.  
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 IMPROVED SELF-CLEANING STANDING SEAM

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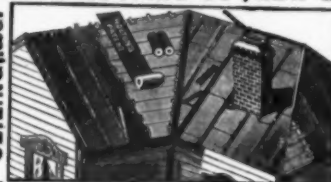
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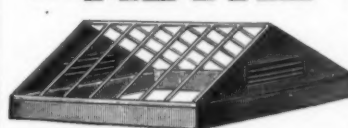
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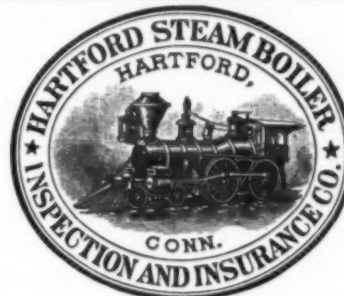
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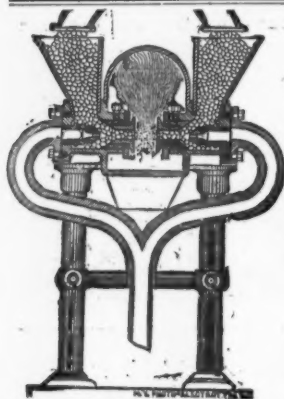
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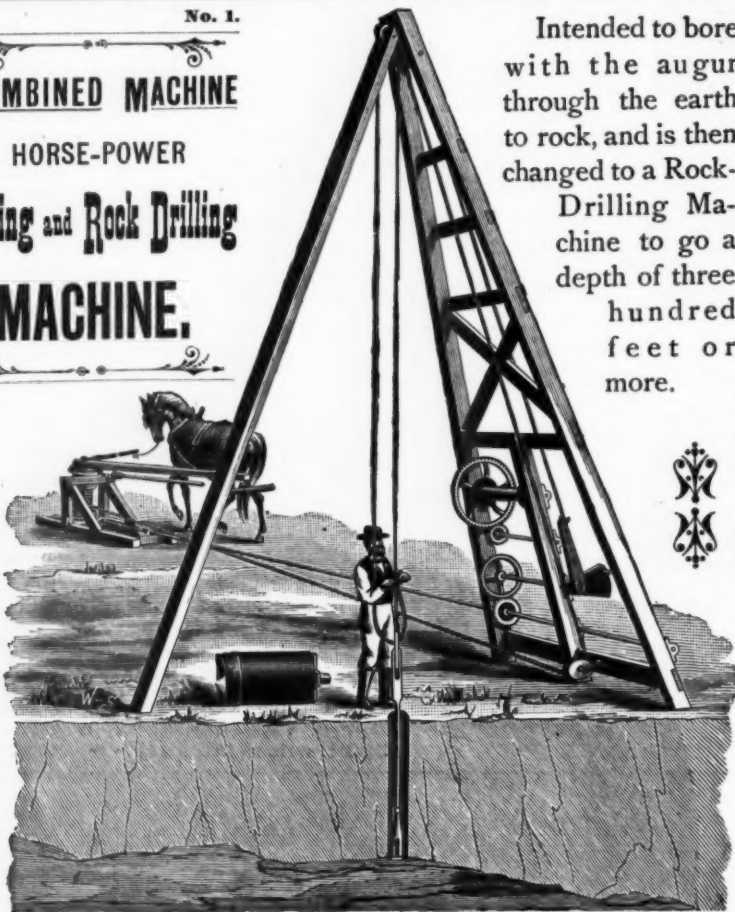
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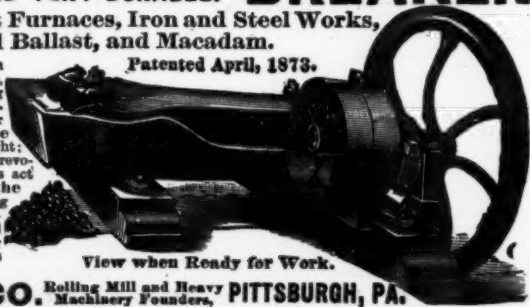
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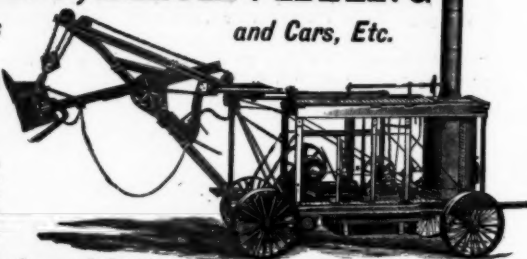
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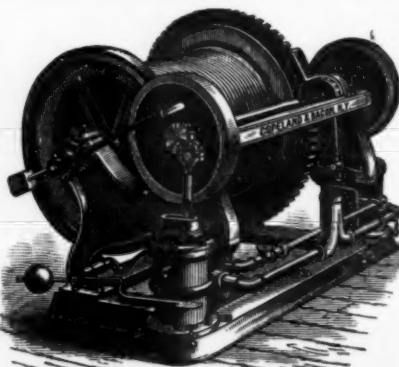
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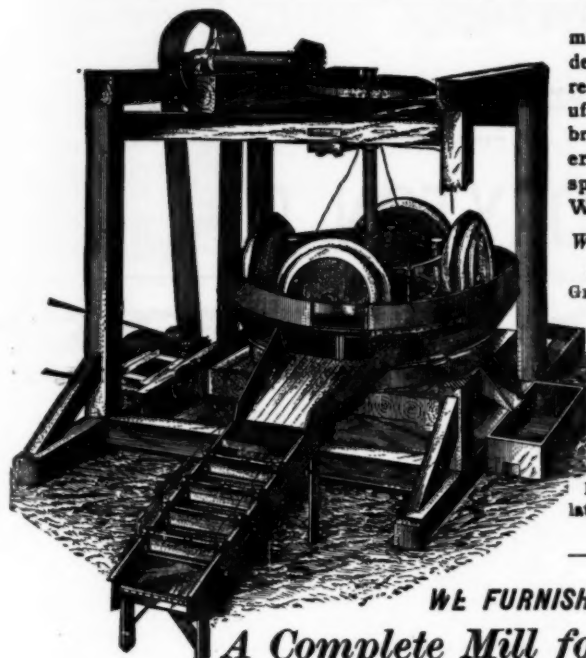
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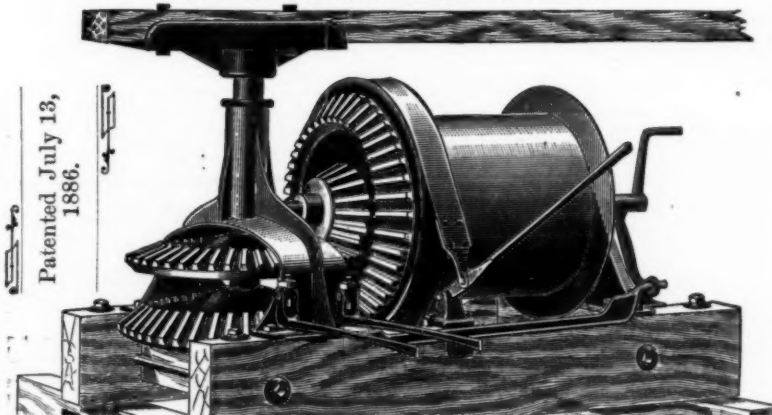
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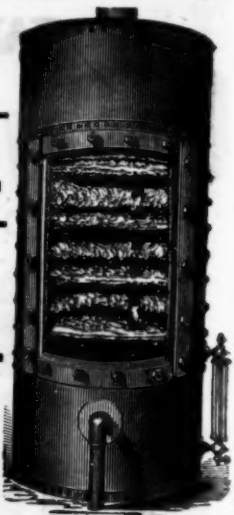
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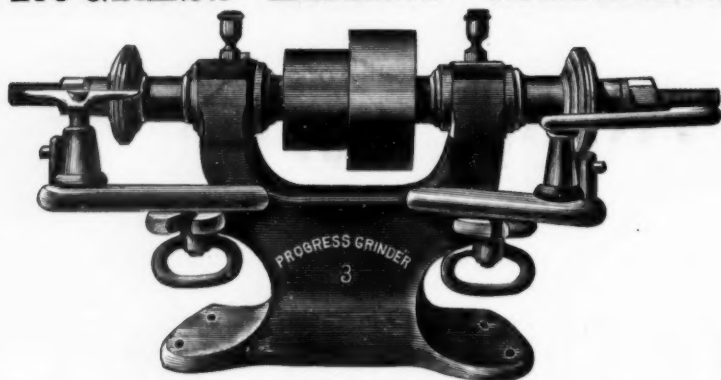
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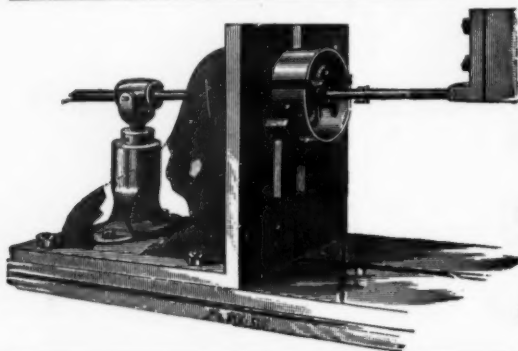
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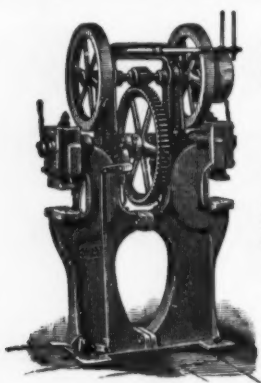


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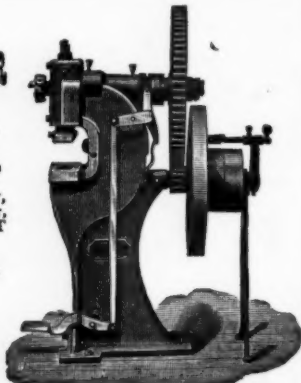
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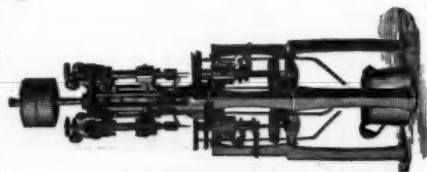
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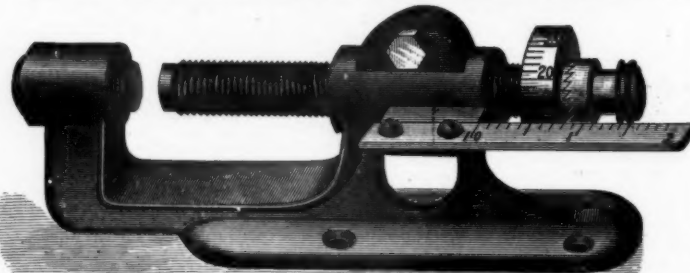
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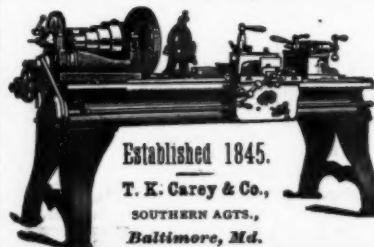
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1st. Great Strength and Durability.

2d. Simplicity of Construction, requiring  
less attention by reason of few adjust-  
ments.

3d. Reliable at all times.

4th. Most effectual in their work, the Table  
meal being of highest character.

5th. Low price.

If you are in need of a mill it will

pay you to send for catalogue and prices.

**SINKER, DAVIS & CO.**

Portable Mill Factory. INDIANAPOLIS, IND.

**Vehicle Spring Co., MANUFACTURERS****PAT. WAGON SPRINGS & WAGON SEAT SPRINGS, CHATTANOOGA, TENN.**Wagon  
Seat  
Spring.The same Wagon can be used as an Express and Lumber  
Wagon. You can raise the end of your Wagon bed and put  
the Springs on or off at pleasure.The hooks that fit the side of the Wagon bed are a part of  
the Spring, making the lightest, the most comfortable, and the  
strongest Spring on the market. These are a great improvement on the old style seat Spring

VEHICLE SPRING CO., CHATTANOOGA, TENN., December 16, 1885.

Gentlemen: After having tried your Springs, both Bolster and Seat, we cordially

endorse them as being in all respects the BEST and CHEAPEST now on the market, and

heartily commend them for general use. Very respectfully, &amp;c.,

VANCE &amp; KIRBY, J. H. WARNER &amp; Co., Wholesale Hardware and Wagons.

DEMENT, BAIRD &amp; Co., C. AULTMAN &amp; Co., CHAS. W. BIRSE, Farm Implements and Wagons.

Address for further information

ATTENTION, DEALERS! A liberal discount to the trade.

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Blaine's Patent.



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# \$500,000 To be Invested in Manufacturing Enterprises

OPEN FOR SALE JUNE 2d, 1887.

ON THE PROPERTY OF

## THE ATHENS MINING & MANUFACTURING CO., at ATHENS, TENN.

A New Railroad Through the Company's Property to the Greatest Iron Fields in the South—A Vein of IRON 75 FEET THICK, only Seven Miles from Athens—Inviting Field for Home-Seekers, and a Splendid Opening for Capital.

The Athens Mining & Manufacturing Company has been organized by an association of gentlemen who are thoroughly acquainted with the wonderful mineral riches of McMinn county, Tennessee, covering the most extensive Iron Fields in the world, measureless beds of Marble of all the best grades and varieties, and vast forests of all the fine Woods used in manufacturing and building, both for ornamentation and utility. The Company is composed of prominent capitalists of New York city, Cincinnati, Louisville, Chattanooga, Knoxville, Atlanta, Selma, Nashville and Athens, the office being at the last named place, with the First National Bank.

The membership of the Company numbers in its composition bankers, brokers, manufacturers, lawyers, journalists, merchants and others, whose high character for business and whose financial standing is a positive guarantee that every proposition made will be faithfully adhered to in detail.

The Company is established upon a business basis, and will be controlled by the strictest business principles. The methods of procedure will conform to such practical and practicable ideas as characterize the most successful and honorable business men of the country. The Company differs from any other ever organized in the South. It does not commence business by flooding the market with stock at a fictitious valuation. It has no stock for sale.

The Lands of the Company comprise a solid body of 800 acres, laying on both sides of the East Tennessee, Virginia & Georgia Railroad, in the northern suburbs of Athens. These Lands have been laid off into wide streets and beautiful lots, preparatory to placing them upon the market, with a view to building a city. The property is a magnificent table land, sufficiently rolling to afford perfect drainage, and commands an excellent view of the valley for miles, and of the Great Smoky Mountains on the east, and the Cumberland Mountains on the West. Upon this property the Company will erect immense Manufacturing Plants, to cost in the aggregate

FIVE HUNDRED THOUSAND DOLLARS,

as a basis for population.

The lots which the Company will sell will be formally placed upon the market on

MONDAY, MAY 16TH, 1887.

All lots are to be sold and deeded under the most positive guarantee that all money paid in on account of sales will go into the hands of a heavily bonded trustee, to be refunded to the purchasers with six per cent. interest if the Company fails in any particular to comply strictly with all its propositions. (See deed.) These include the erection of

- One 100-Loom Plaid Mill, estimated cost \$100,000.
- One 5-set Woolen Mill, estimated cost \$100,000.
- One Cotton Sheeting Mill, estimated cost \$90,000.
- One 3,000-spindle Cotton Carpet Warp Mill, estimated cost \$60,000.
- One 3,000-spindle Warp (for jeans) Mill, estimated cost \$60,000.
- A hotel, to cost \$30,000.
- Public School Building, to cost \$10,000.

In addition to the above the Company guarantees Electric Lights, Water Works and Street Car Lines. Negotiations are also now pending with a view to the extension of the new Railroad to the large Coal Fields, 25 miles distant, on the Cincinnati Southern Railroad, thereby connecting the vast Iron Deposits with Coal. This will then give North Athens her Iron Furnaces.

The Water to be supplied to the town will be taken from the famous Ingleside Spring, adjoining the property, and which flows over 3,000,000 of gallons each day of very cold water, clear as crystal.

The Company will also donate sufficient ground for other manufacturing enterprises to any company or person desiring to establish the same upon the Company's property, and in addition will subscribe to stock in them.

In a word, The Athens Mining & Manufacturing Company was organized to build a city, and it proposes to stop nowhere short of a full realization of its original purpose.

Elegant lithograph plates of the property, showing the location of each large mill and the course of both railroads through the town, will be displayed at various points, and may be had upon application. Plans and specifications of the mills and other improvements are now being prepared and can be seen at the office of the company at Athens.

The new Railroad, a survey of which is now being made, will be built at once, and will extend to Tellico, 22 miles distant. This Road will open up the richest

IRON, MARBLE AND LITHOGRAPH STONE

Deposits in the United States. One of the veins of Red Hematite Ore, only seven miles distant, is 74 feet thick by actual measurement, and contains, by careful analysis, 53 per cent. of Metallic Iron and only seven per cent. of silica. This is the most notable, but not all of the iron ore. The line of the Road is literally bound by deposits of Iron, Marble and Lithograph Stone, while the lands contiguous to the Road are covered with dense Forests of all the valuable Timbers, such as Walnut, Cherry, Ash, Linn, Hickory, Oak, Cedar, Poplar, Locust, Pine, Maple, Sycamore, &c. There are many varieties of Marble—white, black and variegated in all the colors—and the quantity is positively inexhaustible. It is expected, of course, that the building of this Road, which is an assured fact, will contribute largely to the growth of the new city which the Company is determined to establish.

### Copy of Deed of the ATHENS MINING & MANUFACTURING CO.

In consideration of ..... dollars, cash in hand paid, the receipt whereof is hereby acknowledged, and three notes of equal date and equal amount, due respectively in six, twelve and eighteen months, interest from date, we have this day sold and do hereby transfer and convey unto ..... the following described real estate, to wit: Lots....., Block....., in North Athens, McMinn county, Tennessee. We covenant with said ..... and his heirs that the same is unincumbered; that we have a good right to convey, forever warrant and defend the title to the same. Lien retained until the purchase money is fully paid. Under this purchase it is guaranteed by the Athens Mining & Manufacturing Company that it will erect and equip, or cause to be erected and equipped, upon the above mentioned property in North Athens, the following manufacturing industries and improvements, to wit:

- One Woolen Mill, estimated cost \$100,000.
- One Cotton Sheeting Mill, estimated cost \$90,000.
- One Cotton Plaid Mill, estimated cost \$100,000.
- One Warp Cotton Mill, estimated cost \$90,000.
- One Cotton Warp Mill for jeans, estimated cost \$80,000.
- One Hotel, estimated cost \$30,000.
- One Public School Building, estimated cost \$10,000.

Water Works, Street Car Line and Electric Lights. Also said Company guarantee a Railroad from the E. T. V. & Ga. R. R., passing through said North Athens to the ore beds east of Athens. Said company reserves the right to change any or all of the particular lines of industries to be erected, but in no case to lessen the aggregate expenditure of \$500,000. Of the expenditure of the above mentioned \$500,000, the Company binds itself to expend said sum as follows: \$150,000 in twelve months, \$150,000 in twenty-four months, and the remaining \$200,000 in thirty-six months; but reserving unto itself the right to expend same aggregate sum in less time than thirty-six months, should it deem it advisable.

Under the sale and purchase of said Company it is the contract between the vendor and vendee hereto that all money paid in upon the purchase of lots shall go into the hand of a bonded trustee, who shall hold all money subject to the faithful performance of special guarantees by said company, and in case said company fails to fulfill said guarantees in the time above mentioned, said trustee is to refund the money with six per cent. interest thereon.

For any information regarding sale or plans call on or address J. T. Woodward, President Hanover National Bank, H. W. McElwee, with Inman, Swann & Co., Cotton Exchange Building, New York; Hon. R. L. Bright, President Tellico Iron Company, Geo. W. Ochs, Manager Daily Times, A. W. Chambliss, Chattanooga; M. O. French, Jo. J. Ivins, U. S. Marshall, Capt. Wm. Rule, Editor Journal, Knoxville; R. J. Fisher, Cashier First National Bank, Athens.

J. L. YOUNG, Secretary of the Company, Athens, Tenn

## Business Chances.

**WANTED.**—A position by one that has experience with wood-working machinery, getting up designs of work, and some experience at stair-building. Address O. E. M., Commercial Pub. Co., Pensacola, Fla.

**PARTNER WANTED.**—I want a practical party with \$10,000 to purchase half interest and take charge of a well-equipped planing mill and furniture factory combined in one building, and run by one 60-horse-power steam engine, with patent dry kiln attached, and a good trade already established. All who mean business can learn particulars by addressing Jas. B. Hill, Rome, Ga.

**WANTED.**—An experienced, practical machinist to be foreman in a machinery repair shop. To have charge of four or five men. Must be strictly temperate and come well recommended. Address, stating salary required, Goodwin & Co., Durham, N. C.

**A \$3,000 PARTNER WANTED.**—I will sell one-third interest in patent for an "improvement on the shoe brush." The invention is a "rubber band or strip attaching to edge of wooden bottom of ordinary shoe brush; said band is studded with short, stout teeth on one side of brush, long, stout points on front end, and corrugations on the opposite side of brush." The teeth or studs loosen mud from shoes, especially heels and soles; the "points" cleanse the "crease," and the corrugations complete the cleansing. I will sell above interest for cash. Royalties will return 200 per cent. annually on investment. C. H. Montgomery, Jacksonville, Ala.

**WANTED.**—Position as foreman or draughtsman of a machine shop by a person experienced and well up in the best ways of doing work; energetic and practical. Address K., care MANUFACTURERS' RECORD.

**COAL OIL.**—Smith county, Tenn., lies in the coal oil belt, and it is believed that coal oil exists in quantities that would pay handsomely if operated. If capitalists, investors, or prospectors will write me I will give all the information I have. Moores Luster, Carthage, Tenn.

**WANTED.**—A sober, experienced and thoroughly competent mine boss, to open up and superintend inside working of coal mine. Must give references and state salary expected. Address W. P. Laramore, Trout Creek, Ala.

**A FINE OPPORTUNITY.**—Wanted a partner with capital to start a daily paper in a booming Southern city with 12,000 population. Have a paying and prosperous weekly with between 3,000 and 4,000 circulation and best advertising patronage in the State. Good job office, with type, presses and fixtures and paying patronage. Whole plant worth about \$6,000. Paper long established; demand for daily pronounced. A young man preferred, but a man with some capital is wanted who is willing to follow his money into the business and look after it. Address, E. A. O., care MANUFACTURERS' RECORD.

**WANTED.**—A practical pattern maker, capable of making ordinary drawings, with some experience in millwrighting and machine work; also, a practical man capable of selling and erecting wind-mills. Address, Progress Engine & Machine Works, Summerfield, Baltimore county, Md.

**COTTON PRESS.**—I have completed model of a cotton press which possesses substantial merit over any press ever put on market. The advantages are economy in packing power, dispatch of work and ease of management. Not being able to handle it, I desire to dispose of the invention. Correspondence solicited. A. H. Harrington, Harrington P. O., N. C.

**WANTED.**—A man capable of selecting, preparing and rolling in plug tobacco factory. Must be sober and bring good references. Address C. Whittier, Whittier, N. C.

**WANTED.**—A man with a small capital and thoroughly acquainted with furniture manufacturing, to take one-half interest in a factory now being built at Sheffield, Ala. Address Z. T. Spencer, Sheffield, Ala.

**A PARTNER WANTED** with \$5,000 to \$10,000 capital to assist in carrying on the business of a first-class machine shop, with good business prospects, located in Atlanta, Ga. Address all inquiries to Box 297, Atlanta, Ga.

**A PARTNER** with \$10,000 to \$15,000 wanted to operate a cotton mill in Mississippi. Experience not essential. Mill in running order and can be had free of rent for one year, and very low rent after that. I have had 30 years' experience and know that the mill can clear \$100 a day. One firm will contract for all the yarn mill makes for two years at good price. Myron Kent, Natchez, Miss.

**A PRACTICAL Stove Manufacturer** desires to organize a stock company in a growing manufacturing and commercial Southern city to manufacture stoves and fine castings. Corporations and capitalists who would take an interest, please address for particulars, Stove Manufacturer, care MANUFACTURERS' RECORD.

**WANTED.**—A position in some responsible machine-manufacturing, where steam engines or wood-working tools are built. Have 28 years' experience, and have several important inventions in steam engines and wood-working machinery. For further particulars and reference address H. F., 3014 W. Market street, Louisville, Ky.

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## POSITIVE BLAST. IRON REVOLVERS, PERFECTLY BALANCED.

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An illustrated paper on "Housekeeping in an English Rectory," a very entertaining paper by a resident of a charming English rectory.

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By the world's best authorities on the subject of Coffee Making—Maria Parloa, Marion Harland, Mrs. Helen Campbell, Catharine Owen, Juliet Corson, Mrs. D. A. Lincoln. A group of papers more notable and of greater value to housekeepers than anything of the kind ever published.

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A valuable and unique series from the pen of Juliet Corson, one of the most experienced and authoritative writers on cooking, who has had great success and won much fame for her practical writings, this will be a most welcome series of papers particularly so in homes where there are many mouths to fill and much anxiety of mind as to how to fill them comfortably, conveniently and healthfully. School teachers and students, who "board themselves," and old bachelors and "anxious and aimless" maids, will be interested in the perusal of Miss Corson's "Meals for the Many of Moderate Means."

The above are but a few of the attractive features of GOOD HOUSEKEEPING, Volume Five. Send for a sample copy, and then after carefully perusing it decide whether you can make a better investment for \$2.50 than to take it for one year.

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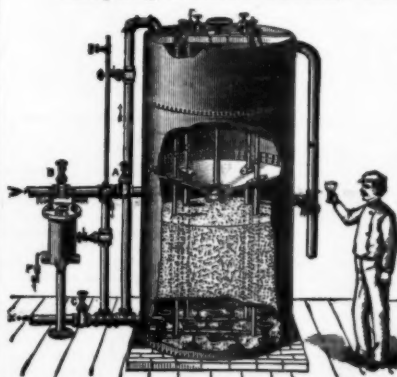
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HYATT PURE WATER CO., Tribune Building, NEW YORK



# ◆ DECATUR ◆

## — THE — GATEWAY OF ALABAMA.

### ✱ A REVIEW. ✱

The following Enterprises have been located in Decatur, Ala., in the last Three Months :

The Decatur Land, Improvement & Furnace Company was organized on the 11th day of January of the present year. Since that time there have been commenced—

1st. The Charcoal Company's plant, costing \$125,000. Fifty ovens are erected and ready for operation. Employs 200 men.

2d. A 70-ton Charcoal Iron Furnace, costing \$190,000. Gordon, Laurea & Straubel, of Philadelphia, builders. Employs 100 men.

3rd. One 100-ton Blast Iron Furnace, costing \$225,000, by the Decatur Land, Improvement & Furnace Company. Employs 200 men.

4th. The Decatur Iron Bridge & Construction Company, George A. Mooar, of Keokuk, Iowa, president; Mr. Robt. Curtis, of Chicago, vice-president. Cost \$100,000. Employs 150 men.

5th. The American Oak Extract Co., J. E. McCarty, of Barksville, W. Va., president. This is the largest enterprise of the kind in the world. Cost \$65,000. Employs 100 men.

6th. Ivens & Son, of New Orleans, Steam Engines and Iron Working Plant. Building is 280 feet by 100 feet. Cost \$100,000. Employs 100 men.

7th. Morse Cotton Compress, 90-inch, from Steers & Co., of New Orleans. Plant costs \$45,000. Employs 52 men.

8th. N. K. Meade & Co., of Cincinnati, Ohio, mammoth Sash, Door & Blind Factory. Cost \$50,000. Will employ 100 men.

9th. Berthard & Co., of Springfield, Ohio, Sash, Door & Blind Factory, costing \$15,000. Employs 20 men.

10th. Brush Electric Light Co., for a thirty light plant. Cost \$8,000. Employs 5 men.

11th. The Ironton, Ohio, Wheelbarrow Company, costing \$25,000. Employs 50 men.

12th. Inman & Co., of New York City, Water Works System. Cost of plant, \$100,000.

13th. Blymeyer Artificial Ice Company, of Cincinnati, to be in operation June 1st. Cost of Plant, \$10,000.

14th. Three Brick Yards are in operation at this place, one Eureka Dry Press Steam Machine, two Anderson Chief Machines. Cost \$40,000. Men employed, 90.

15th. Decatur Lumber Co., B. E. Poley, Auburn, Ill., manager. Carries 500,000 feet of lumber in stock.

16th. Three hundred and fifty carpenters are engaged in erecting cottages.

17th. Natural Gas Co., A. F. Murray, president; H. G. Bond, of New York, treasurer. Capital stock \$200,000.

18th. First National Bank, capital \$100,000. C. C. Harris, president; W. W. Littlejohn, treasurer.

19th. Second National Bank, capital \$100,000. Judge H. G. Bond, president; W. K. Wilson, of Kansas City, treasurer.

20th. Merchants' Insurance Co., of Decatur; capital \$100,000. J. W. Nelson, of Chicago, president; C. Peacher, of Montgomery, secretary.

21st. Decatur Building Association, capital \$300,000.

## ◆ Railroad Facilities. ◆

This town lies on the south bank of the Tennessee river, at the junction of the Louisville & Nashville Railroad and the great East Tennessee, Virginia & Georgia system. Thus, it has already an admirable railroad system, her trunk lines running to all cardinal points of the compass. In addition to these great trunk lines of road, the Rome & Decatur Railroad, from Rome, Ga., northwest, to Decatur, is being rapidly built, and will soon be completed.

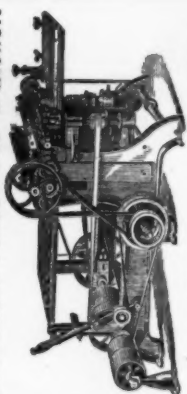
Charters for two other roads have been obtained, one running southwest to Aberdeen, Miss., to connect with the Illinois Central system, the other running south and west to Selma, Ala., to connect with the Mobile & Ohio at Columbus, Miss.

### ✱ Decatur is one of the Healthiest Cities in North Alabama. ✱

The Health Officer's report for Morgan County shows that the death rate among the whites in Decatur for the year 1886 was only 11 in 1,000.

**THIS IS AS GOOD A REPORT AS ANY TOWN IN THE STATE CAN SHOW.**

Economist Planer and Matcher.



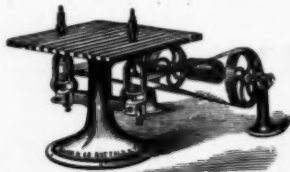
\$325.00  
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15 inch swing, 6-foot or 8-foot bed.  
These machines are made a specialty  
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## TOLAND & SON, Front & Low Streets, Baltimore.

Particular attention paid to Large Circular Work. We warrant our Circular  
Saws to stand more strain, without buckling or cracking, than any other make.  
We make all kinds of Tough-Tempered Circular, Mill, Cross-Cut, Band and Drag  
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made to pattern, and Moulding Bits warranted equal to the Best. N. B.—We  
make no charge for hammering any Large Circular Saw that we can't make "go."  
GIVE US A TRIAL, and for toughness of temper, durability and quality of  
material, compare our work with the best you have ever used.

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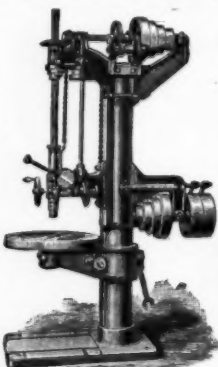
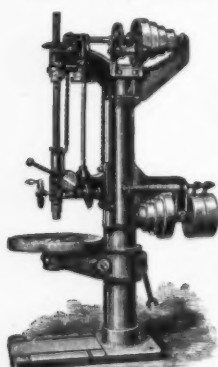
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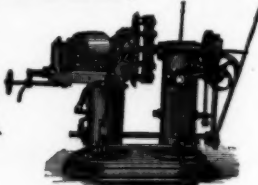
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CHAMFERING, HOWELING, AND  
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Chamfering, Howeling and Crozing Machines, Stave Dressers, Stave Jointers, Hoop Drivers,  
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Also LATHES,

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For Turning Handles and all  
other Turned Articles of Wood.



If you want Shingle,  
Heading and Stave Machi-  
nery write for Catalogue A.  
If you wish Handle Machi-  
nery ask for Catalogue  
B.

We solicit correspond-  
ence, and will give it  
prompt attention.

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Planing Mills, Furniture Factories, Sash, Door and Blind  
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MACHINERY FOR PATTERN SHOPS A SPECIALTY.

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BUILDERS OF

Capacity 15,000 to 450,000 feet per day. CIRCULAR SAW MILLS Complete outfits  
planned and furnished.

ENGINES, 15 to 800 Horse-Power. BOILERS OF IRON  
OR STEEL.

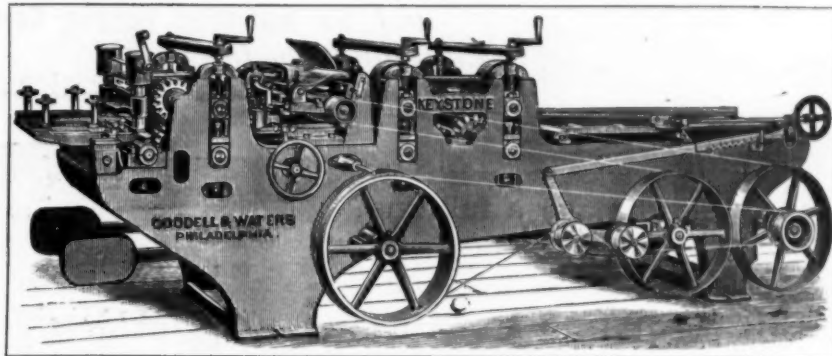
BAND SAW MILLS, with Friction or  
Steam Feed.

STEARNS' Fractional Head Blocks, Edgers, Cut-Off Saws, Trimmers.  
The Wilkin Pony Gang. No foundation. Capacity 30,000 to 40,000 feet of Flooring per day. The  
Wilkin Heavy Gang Saw Mill for large mills. Lath and Picket Mills, Bolters, Conveyors, &c.



# "KEYSTONE"

**Rapid Feed Flooring Machine.**



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**GOODELL & WATERS, Manufacturers,**

**WESTERN WAREHOUSES:**

11 and 13 S. Canal Street,  
CHICAGO, ILL.

MR. C. L. RICE, MANAGER.

3002 Chestnut Street,

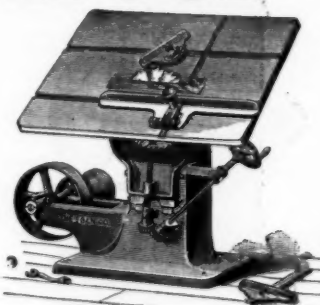
**PHILADELPHIA.**

— **PATENT** —

## WOOD-WORKING MACHINERY

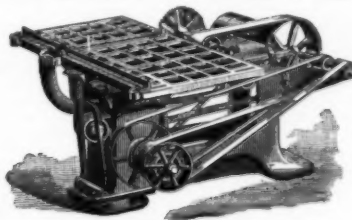
**LATEST AND MOST IMPROVED.**

Complete Outfits Furnished for any Wood-Working Establishment.



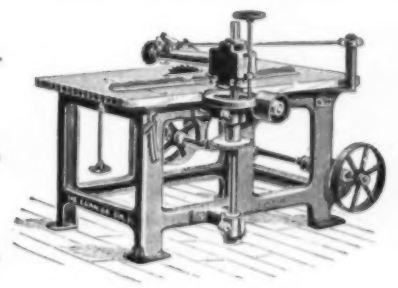
No. E 189 S-VARIETY SAW.

**WRITE  
FOR  
PRICES.**



No. 2 SELF-FEED RAILWAY CUT-OFF SAW.

**ECONOMICAL.  
PRACTICABLE.  
DURABLE.  
EFFICIENT.**



No. 2 SELF-FEED HIP SAW.

**THE EGAN COMPANY, Nos. 228 to 248 West Front St., MANUFACT'RS,**  
**CINCINNATI, O.**

(6) THOS. P. EGAN, President.

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**BRIDGEPORT BRASS CO., 19 Murray Street,**  
**NEW YORK.**

— MANUFACTURERS OF —

**Sheet Brass, Seamless & Brazed Brass AND Copper Tubing**

*BRASS and COPPER WIRE, and RODS,*

**Gas and Kerosene Burners and Trimmings. The Celebrated Leader Burner a Specialty.**

**ELECTRIC COPPER WIRES, Plain and Covered. Particular Attention given to Cutting Blanks and Metals to Order.**

Buy "THE NEW SOUTH." HANDSOMELY BOUND IN CLOTH. PRICE, \$2.50. MANUFACTURERS' RECORD CO., Publishers, Baltimore, Maryland.

## THE GLOBE Incandescent Lamp.



A 400-Candle Power Coal Oil Burner which will brilliantly illuminate a room 40 feet square.

For lighting Storerooms, Hotel Offices, Dining Rooms, Halls, Churches, Restaurants, Saloons, etc. Wick 12 inches in circumference. Reservoir holds 15 pints. Costs less than two cents per hour to operate. The wick is raised by a vertical movement without Ratchets or Rollers.

Produces a soft, steady, golden illumination at about one-third the cost of gas.

Affords the convenience of but one reservoir to fill and one globe to clean. Specially adapted for lighting factories where a powerful STEADY light is required.

TWO GLOBE LAMPS will produce as much light as one arc electric lamp, and will illuminate a room with greater satisfaction, requiring no machinery.

WE make a full line of Oil and Gasoline Torches, for lighting Mills, Machine Shops, Foundries, &c.

The "Victor" Convertible Furnace,

for Tinner's and Plumbers' use, which will heat coppers and melt metal QUICKER than any furnace in the market.

SEND FOR CATALOGUE.

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## The "NEW DAVIS" Single Generator VAPOR COOK STOVE.

WITH

The Original Steel Frame and Automatic Safety Lighting Device. All others follow as imitations. Buy none but the Original. Made in a full line of sizes, with ovens above or below. The Oven on the "NEW DAVIS" RANGE is the largest placed on a Vapor Stove. Is supplied with Two burners and an Automatic Lighting Device. The burners light from the outside.

The Steel Frame Saves Breakage! Saves Freight! Saves Expense! Saves Annoyance! Burners are Simple, Powerful and Economical, and light like Electricity.



D. B. BAYLESS & CO.

CINCINNATI, OHIO.

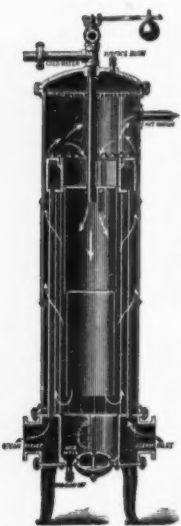
Agents for "THE NEW DAVIS."

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THE STANDARD LIGHTING CO.

## THE GOUBERT PATENT Feed-Water Heater AND PURIFIER.



Can be thoroughly cleaned without taking it apart.

Has a positive device for the prevention of Back Pressure.

Purifies the water better than any other exhaust steam heater.

Has a positive circulation, making all parts of the heating surface equally effective.

Brass Tubes Free to Expand.

Efficient and Durable.

For Circulars and Specifications, address

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5 BECKMAN STREET, NEW YORK.

1837. NOVELTY WORKS. 1886.

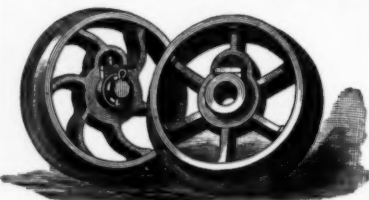
JAMES MURRAY & SON,  
Machinists and Millwrights

Engines and Boilers, Mills of all kinds, Marine Railways, &c. Improved Clay Tempering Machinery, Steam or Horse Power. Phosphate Machinery, Crushers, Rollers, Mixers, &c., &c.

40, 42 & 44 York Street,  
NEAR LIGHT, BALTIMORE.

Repairing of all kinds promptly done.

## Patent Tram Wheel



THE MOST PERFECTLY

Chilled and Automatic Self-Oiler

IN THE MARKET.

Will run two months with one filling of the reservoir. The economy in oil by using these wheels pays for them. For particulars and prices of Wheels, Axles and Mining Cars, address,

GEORGE PEACOCK,  
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Bates' Hand Elevators.  
Patented April 18, 1871. Released July 28, 1876.  
OVER 6,000 IN USE.

Adapted for Warehouses, Stores, Factories, Hotels, Public Institutions, and every place where merchandise, &c., is transferred from one story to another.

JAMES BATES, Patentee,

Nos. 1 3 & 5 President Street. BALTIMORE.

## For Sale Cheap ON LONG TIME.

1 32 in. x 32 in. x 9 ft. heavy, second-hand planer.  
1 Davis Keyseater, 1/4 in. to 1 in., Keyseater, Bargain.  
3 Steam Pumps, second-hand. All sizes.  
1 Chasing Lathe, 17 in. x 5 ft. Bed. New Haven.  
1 No. 4 Sturtevant Blower. Good as new.  
1 Second-hand Corn Grinding Mill.  
1 10 Horse Power and 1 12 Horse Power Portable Engine and Boiler on wheels, second-hand.  
Vertical Engines, 1 to 20 Horse Power.  
Horizontal " 6 to 30  
Vertical and Horizontal Boilers, either iron or steel—any horse power desired.  
Round and Square Tanks—all sizes.  
Saw Mills and Planing Mill Machinery and Machine Shop Tools.

Also,  
Shafting, Pulleys, Hangers, Belting, Belt Fasteners, Lace Leather, Belt Grease, Journal Grease, Pipe, Tubes, Fittings, Valves, Pipe Tools, Files, Bolts, Set and Cap Screws, Wrought Rim Pulleys, Sheet Gum and Packing, all kinds. Boiler Scale Preventive, Gardner Governors 1/2 in. to 4 in. in stock.  
Headquarters for Gas Engines.  
One Sturtevant Blower, Monogram Pattern.

WM. C. CODD,

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BALTIMORE, MD.

## HUGH SISSON & SONS,

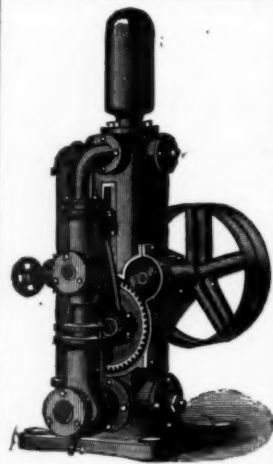
210 E. Baltimore St., bet. North & Calvert Sts.,  
BALTIMORE.

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## Marble Monuments

Tombs, Altars, Counters,  
Furniture Slabs, Mantels, Tiles.

Estimates and Drawings Free.



Webber's Differential Boiler  
Feed and Force Pump.  
Simple, Efficient, Durable and Economical. Send for catalogue.

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AGENTS—J. Post, Jr. & Co., Boston, Mass.; Fairbanks & Co., St. Louis, Mo.; H. P. Gregory & Co., San Francisco, Cal.; R. H. Buchanan, Montreal, P.Q.

## McShane & Bell Foundry

Fine Iron and Brass Castings Made to Order.



Manufacture those celebrated Bells for Tower Clocks, Court-Houses, Cotton Mills, Factories, &c. Prices and catalogues sent free. Address H. McSHANE & CO. Baltimore, Md.

Mention this Paper.

## ARCTIC ICE MACHINE MFG. CO.

Works, 4, 6, 8 & 10 West Street, Cleveland, O.  
Manufacturers of Machines for Making Ice and for Refrigerating Breweries, Pork Houses and buildings of all kinds requiring a steady, low temperature. Over 100 of our machines now in use. Send for any particulars desired. P. O. Box 92, Cleveland, Ohio, or P. O. Box 343 Cincinnati, Ohio.

If you are not already a subscriber to the BALTIMORE MANUFACTURERS' RECORD, send us \$3 and you will receive it regularly for one year, or six months for \$1.50.



## TRADE NOTES.

THE Syracuse Twist Drill Co. have published a new price-list to supersede all others. This well-known concern has been obliged to more than double their capacity by the addition of a fine new building adjoining their works on Grape street, Syracuse, N. Y. They manufacture every variety and size of drills for wood and metal; also tool-holders, drill chucks, Clark's patent double cut countersink and King's patent screw-driver bit. The new price-list should be in the hands of all hardware dealers. Send your address to Syracuse Twist Drill Co., Syracuse, N. Y., and get one now.

OWING to the great demand for their goods, Messrs C. W. Raymond & Co., Dayton O., will be compelled to find additional quarters for their next season's output. Their Perfection brick press has had an immense sale, and it is said, almost wherever sent, duplicate orders have been returned. The wrought-iron tempering wheel and in fact all their brick-makers' supplies have found a ready market. The firm having had a large experience in this line of work, know what is wanted and are able to keep with the advance in their special line, a fact which seems to be appreciated by the trade.

MESSRS. BRADLEY & Co., of Syracuse, N. Y., have removed their branch office in New York city from 22 College Place to 32 and 38 College Place, corner of Murray street, where, with enlarged quarters, will be kept on hand for immediate delivery a full line of their manufactures.

A WATCHMAN'S clock is of great value in every institution where a watchman is employed, and is a very material aid towards the protection of property from fire and robbery. Mr. O. E. Hausburg, 71 Nassau street, New York, who is the sole agent for the "Standard" Watchman's Clock, has issued a new circular giving a full description of this invention, which he will send to any of our readers upon application.

A BIG CONTRACT.—The Abendroth & Root Manufacturing Co., of New York, have just closed one of the largest contracts ever made for sectional safety boilers at one time in this country. It comprises an order given by the Southern Cotton Oil Co. for 30 Root Sectional Safety Boilers, to go to New Orleans, Houston, Little Rock, Memphis, Atlanta, Savannah, Wilmington and Montgomery, making over 4,000 horse-power.

OUR American manufacturers are more particular this year in sending out feelers for foreign trade. Mr. A. Straus, manager of the Vulcanite Emery Wheel Department of the New York Belting & Packing Co., New York, sailed for Europe on the 11th inst. in search of business.

FRANK W. SWETT, manufacturer of band and scroll saws, 69 S. Canal street, Chicago, Ill., reports his business considerably on the increase throughout the South; also that he is shipping many goods in his line to the Pacific coast. The saws manufactured by Mr. Swett are notable for their durability and effectiveness in all kinds of lumber. They are made of very fine selected material, every blade being fully warranted. Hereafter each blade will be stamped with a new trade mark. The brand of an eagle. They are for sale by leading machinery manufacturers and dealers using this class of goods. Mr. Swett also manufactures a full line of band saw tools and supplies, and will furnish his new illustrated catalogue upon application.

THE demand for roller chain, manufactured by the Roller Chain Belting Co., of Columbus, O., is rapidly increasing. They are running full time with a good outlook for the season.

THE Globe Iron Roofing & Corrugating Co., Cincinnati, O., furnish an iron roofing that is cheaper than shingles and saves insurance. A catalogue will be sent on application, giving valuable information, regarding iron roofing siding, ceiling roof paper, roof painting, etc. Everyone contemplating building should send for and read their catalogue. This company make a special discount to architects, carpenters and builders, who handle their goods in preference to others, and claim that their contracts this year exceed in magnitude any other like concern in this country, and their sales are double so far over last year's business, which speaks volumes for the well-known reputation of their goods among the trade generally.

THE Ewart Manufacturing Co. have issued the following notice to the trade: We beg to inform you that Burr & Dodge are our sole licensees under all of the patents owned by us for the States of Maryland, Virginia, Delaware, Pennsylvania and New Jersey, South of Trenton.

Referring to the above Messrs. Burr & Dodge say: "In accordance with the above we would announce that, for the convenience of our customers, we will maintain an office in Baltimore, and carry a stock of goods. We are temporarily located at No. 11 South Frederick street. In view of the fact that the Ewart Manufacturing Co. has been represented by R. Swormstedt and later by Talbot Watson, under the name of Ewart Link-Belt Agency, we would especially urge that to avoid delay you address all communications for link-belt and supplies to Burr & Dodge, No. 11 South Frederick street, Baltimore, Md."

THE Southern department of the W. B. Barry Saw & Supply Co. write us from Chattanooga as follows: "We have increased our plant 30x86 feet. The increase in business demanded it. We have a great many orders on hand; also our main house at Indianapolis is full of work. Our circular and band saws are taking the lead by all mill men. We are also agents for the Page Belting Co. We keep a full stock of belts, and the demand for the Page belts is increasing."

FIRE ENGINE CONTRACT.—The board of fire commissioners, of Baltimore, have awarded the contract for the new engine for the use of No. 13 company to the Silsby Manufacturing Co., of Seneca, New York. The price is \$2,900 and the old engine.

## Important.

When visiting New York city, save baggage express and carriage hire, and stop at the Grand Union Hotel, opposite Grand Central Depot.

600 handsomely furnished rooms at \$1 and upwards per day. European plan. Elevators and all modern conveniences.

Restaurants supplied with the best. Horse cars, stages and elevated railroads to all depots. You can live better for less money at the Grand Union Hotel than any other first-class hotel in the city.

THE American House, Boston, has water-foots in every chamber, and we believe there is not a dark room in the hotel. That's what travelers want this time of year—fresh air and plenty of running water!

WHEN in Cincinnati, stop at the Palace Hotel. Rates, \$2.00 and \$2.50 per day; meals, 50 cents each. Elegant rooms; fine table, and centrally located.

Look Carefully through this paper and you may find an advertisement of some machinery or other goods that you are in need of. Preserve this copy for future reference.

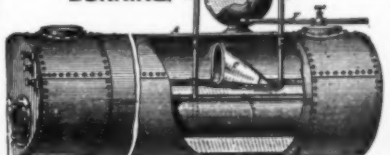
## List of Patents.

The following Patents were granted to citizens of the Southern States, bearing date May 10, 1887. Reported expressly for this paper by Louis Bagger & Co., Mechanical Experts and Solicitors of Patents, Washington, D. C.

Adams, A. H., Clio, S. C. Sash fastener.....	362,866
Basnett, P. S., Basnett, W. Va. Gate.....	362,703
Banard, W. H., Jr., Baltimore, Md. Pegging jack.....	362,869
Bergman, Isaac, Baltimore, Md. Riding saddle. (2 patents).....	362,707
Billups, Cealy, Norfolk, Va. Plow.....	362,598
Brosius, J. M., Atlanta, Ga. Vehicle axle.....	362,486
Buckton, W. A., Covington, Ky. Rain-water cut-off.....	362,488
Campbell, C. W., J. J. Hill and W. E. Dodd, Rose Mill, Va. Reel for displaying and measuring dry goods.....	362,490
Campbell, London, Alexandria, Va. Float for water-tight glass tubes.....	362,719
Carpenter, S. L., Moscow, Tenn. Gin brake.....	362,491
Clark, C. H., Caldwell, Texas. Seed planter.....	362,607
Clater, J. E., Wheeling, W. Va. Extensible ladder.....	362,609
Cox, R. L., Greenville, N. C. Whiffletree.....	362,574
Crockett, J. R., Flatonia, Tex. Dredging machine.....	362,877
Cummings, J. K., Ladonia, Texas. Coffee pot.....	362,878
Cunningham, Peter, Brightwater, Ark. Game carrier.....	362,879
Daniel, J. H., Paris, Ky. Cutter bar.....	362,882
Dennis, Albert, Franklin, Tenn. Back band hook.....	362,498
Dillon, W. H., Elkton, Ky. Handsaw.....	362,726
Elliott, G. S., Mobile, Ala. Automatic railway switch.....	362,578
Exner, Wm., Harper's Ferry, W. Va. Cut-off and spout.....	362,917
Ferris, H. M., and W. Gallon, Village Mills, Texas. Log turner.....	362,886
Greer, J. W., Austin, Texas. Money changer and counter.....	362,738
Jordan, A. C., Era, Va. Paper box.....	362,583
Kennedy, James, Franklin, Ky. Check row attachment for corn planter.....	362,515
Kerrison, Charles, Jr., Charleston, S. C. Barbed nail or spike.....	362,843
Mahaffey, J. B., Baltimore, Md. Planing and matching machine.....	362,896
Mitchell, J. A., and W. B. Thomas, Westminster, Md. Bag fastener.....	362,772
Noble, C. M., Anniston, Ala. Electric lamp.....	362,852
Philbrick, J. J., Mobile, Ala. Machine for manufacturing barrel staves.....	362,901
Rigby, James, Galveston, Tex. Swing.....	362,785
Roberts, W. E., Hartford, Ky. Shutter for photographic cameras.....	362,663
Samford, A. F., and C. H. Peavy, Calhoun, La. Cotton chopper.....	362,541
Shin, J. M., Adamsville, W. Va. Portable desk.....	362,589
Sparks, J. P., Austin, Tex. Street car motor.....	362,795
Sutton, J. T., and G. M. Terry, Sharon, Tenn. Bridle.....	362,591
Thomas, H. H., and J. W. Woodward, Dahnega, Ga. Spring motor.....	362,555
Thornburgh, W. P., New Market, Tenn. Marine propulsion.....	362,536
Van Pelt, J. K., Nashville, Tenn. Double acting pump.....	362,681
Wells, James, Paris, Ky. Earth auger.....	362,562
Wells, Sallie A., Annapolis, Md. Thimble.....	362,593
Whitehurst, R. W., Norfolk, Va. Plow.....	362,912
Williams, I. C., Auburn, W. Va. Cupboard catch.....	362,805

**A. P. THAYER,**  
Solicitor of U. S. and Foreign  
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Experience of Over 20 Years.

**HOW TO KEEP BOILERS CLEAN"**  
And Prevent SCALING, FOAMING, BURNING. Price \$75.00. Removes Lime Oil, Magnesia, without use of Compounds.



**Hotchkiss Mechanical Boiler Cleaner,**  
Illustrated in an eighty-eight page book, which will be mailed FREE, to any address, by JAS I. HOTCHKISS, 120 Liberty St., N. Y. Beware of Infringers.

**PORTLAND CEMENT.**  
German and English Brands of Best Quality.  
Send for tests and all particulars to  
**ERSKINE W. FISHER**  
WELLES BUILDING, No. 19 Broadway, - - NEW YORK.

**C. L. JACKSON & Co.**  
14 W. German Street,  
BALTIMORE, MD.

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**STAR TOOL CO.**  
Lathes and Machine Tools.  
**W. F. & JOHN BARNES CO.**  
Lathes, Drills and Light Machinery.  
**F. E. REED,**  
Lathes, Millers, &c.  
**GARDNER VERTICAL ENGINES,**  
1 to 25 Horse Power.  
**HUYETT & SMITH MFG. CO**  
Exhaust Fans and Blowers.  
**AKRON IRON CO.**  
Calendered Iron and Steel Shafting.  
**SCHIEREN & CO.**  
Extra, Standard and Electric  
Leather Belting.  
We carry stock of above manufacturers,  
machinery of all kinds. Estimates furnished  
on complete shop outfits.  
**WE HAVE SOME SECOND-HAND  
ENGINES AND MACHINERY  
FOR SALE.**  
List sent on application.

**THE Stevens Filter Co's**  
UPWARD  
Self-Cleansing Filters.

The best filter for rapid and thorough purification of water for household use. Thousands in use and all give satisfaction. On durable, simply constructed, tastefully decorated, several styles, many sizes, various prices. Send for catalogue to



**The Stevens  
FILTER CO.**  
Toledo, O.  
or Bartlett, Hayward & Co., Baltimore, Md.;  
J. S. Silva, Savannah, Ga.;  
Phillips & Butterfield Mfg. Co., Nashville, Tenn.;  
F. Ozanne & Co., Memphis, Tenn.;  
Simmons Hardware Co., St. Louis, Mo.;  
E. D. Smythe, Jr., Augusta, Ga.

If you want the BEST, MOST EFFICIENT and DURABLE  
**CENTRIFUGAL PUMP**



Buy "The New South"  
—PRICE \$2.50—  
HANDSOMELY BOUND IN CLOTH.  
Manufacturers' Record Co., Publishers,  
BALTIMORE, MD.



### Will Bessemer Steel Works be Built?

WASHINGTON, ARK., May 14, 1887.

*Editor Manufacturers' Record:*

Roberts, Morris & Co., antimony miners at Antimony City, Howard county, Ark., assert their intention to put up large Bessemer steel works near there at an early day. They have everything necessary to this manufacture, including the capital.

E. L. GIVENS.

### Erecting a Large Ice Factory.

NASHVILLE, TENN., May 14, 1887.

*Editor Manufacturers' Record:*

The Excelsior Ice Co., with a capital stock of \$100,000, are erecting a fifty-ton ice making plant in this city; it is nearing completion and will be in full operation in 3 weeks from this date. We are erecting an Arctic machine of special make and design, and we will have the largest and perhaps finest ice machine in the United States. Our fifty tons of ice will be made with one machine, while other ice plants of same capacity use two or three machines to make the same amount of ice.

EXCELSIOR ICE CO.

W. H. HOWE, Manager.

### Additional Machinery.

AUGUSTA, GA., May 13, 1887.

*Editor Manufacturers' Record:*

We have ordered 70 40-inch looms and 15 ring spinning frames, 192 spindles each; making 2,880 spindles, to fill spare space on our first floor. When in place will have 880 looms and 29,344 spindles. Do not require any additional preparing machinery.

JOHN P. KING MANFG. CO.,

CHAS. ESTES, President.

### Information Wanted.

GALLATIN, TENN., May 14, 1887.

*Editor Manufacturers' Record:*

Gallatin wants a good system of water works, suitable to a growing town of 3,500 to 4,000 population. It is especially wanted for fire purposes, as the town is well supplied with wells and cisterns. We have no water fire engine, but two chemical engines. What steam pump is there that would draw water from large cisterns and throw it with force through hose and nozzle? We invite correspondence.

BOYERS & RUSSWURM.

### To Bore for Gas.

FORT WORTH, TEXAS, May 11, 1887.

*Editor Manufacturers' Record:*

A company has been formed here for the purpose of boring for gas. Prospects for gas are good in this section. The incorporators are Thomas Roche, W. S. Pendleton, T. W. Powell, M. C. Hurley and W. T. Ferris.

MERCHANTS & MANUFACTURERS BUREAU.

J. P. ALEXANDER, Secretary.

CHATTANOOGA, TENN., May 14, 1887.

*Editor Manufacturers' Record:*

We have completed all arrangements to manufacture Bennett Gas Economizers, and independent gas plants in this city. We have secured the service of Mr. W. D. Muller, of Washington, D. C., as superintendent. Have purchased all material for the immediate construction of a large number of machines for which we already have good demand. We commence active operation on 20th inst.

THE STANDARD GAS MACHINE CO.

H. REAVES, General Manager.

### Doubling Capacity Ice Factory.

JACKSONVILLE, FLA., May 15, 1887.

*Editor Manufacturers' Record:*

We are putting another 10-ton Arctic ice machine in our factory, which will give us 20 tons per day.

ARCTIC ICE CO.,

R. H. McMILLAN, Supt.

### To Erect a Large Hotel.

BALTIMORE, MD., May 12, 1887.

*Editor Manufacturers' Record:*

Have purchased 75 feet on Charles street, southeast corner Eager street, 184 feet deep, and propose erecting a hotel; probable cost, \$400,000. Have purchased about 15 acres of land on Lake Roland from Sutton estate, with idea of building a country club house, to cost \$50,000.

A. L. GORTER & CO.

CHATTANOOGA, TENN., May 10, 1887.

*Editor Manufacturers' Record:*

We have the contract for remodeling and building an addition to the Huntsville Hotel, Ala., involving between \$80,000 and \$90,000; also signed the contract for remodeling and building an addition to the Read House in this city yesterday, to cost between \$50,000 to \$60,000. We also have the contract for an addition to the Chattanooga Ice & Storage Co., involving some \$8,000.

A. J. STOOPS & BRO.

DECATUR, ALA., May 12, 1887.

*Editor Manufacturers' Record:*

The Gunter's Mountain Coal & Coke Co. is not organized yet, but we are hopeful of getting up the organization between now and the first of June.

SCOTT & GRIESBERG.

LOUISVILLE, KY., May 11, 1887.

*Editor Manufacturers' Record:*

The building we are now erecting at Memphis, Tenn., is a brick freight depot, 50x400 feet, which will cost about \$15,000.

NEWPORT NEWS & MISSISSIPPI VALLEY CO.,

JAS. L. FRAZIER, Supt.

COVINGTON, KY., May 14, 1887.

*Editor Manufacturers' Record:*

I and others have formed a company to develop oil, gas and mineral lands.

W. H. GLORE.

UNION CITY, TENN., May 11, 1887.

*Editor Manufacturers' Record:*

A company has been chartered here to build gas works, but I doubt if it will be done. Mr. A. J. Hoopale has been working it up.

S. WADDELL, Mayor.

### Developing Marble Quarries.

ATLANTA, GA., May 12, 1887.

*Editor Manufacturers' Record:*

We have already machinery on our black and white marble quarry near Rome and getting out blocks, with more ordered, and intend to quarry extensively at once.

ATLANTA MARBLE CO.,

F. M. COKER.

### Will Erect Spoke and Hub Factory.

ASHLAND, KY., May 12, 1887.

*Editor Manufacturers' Record:*

Will commence the erection of a spoke and hub factory at once.

J. W. HENDERSON.

DALTON, GA., May 11, 1887.

*Editor Manufacturers' Record:*

The city will shortly build a system of water works. The bonds will soon be ready to offer on the market, and when sold work will begin at once.

J. H. KENNER.

ASHEVILLE, N. C., May 14, 1887.

*Editor Manufacturers' Record:*

We have received the contract to build gas works at this place, and considerable headway has been made on said works.

MORRIS & SHANK.

### Broom Factory.

BISHOPVILLE, S. C., May 12, 1887.

*Editor Manufacturers' Record:*

I have machinery en route for my broom factory.

P. G. BOWMAN, JR.

### Erecting Roller Flour Mill.

COLUMBIA, TENN., May 12, 1887.

*Editor Manufacturers' Record:*

I am now putting up a full roller mill, 12 reductions, using full line of centrifugal reels for bolting. Capacity 75 to 100 barrels. Contractors are the well-known firm E. P. Allis & Co., of Milwaukee, Wis.

J. B. ASHTON.

DANVILLE, VA., May 16, 1887.

*Editor Manufacturers' Record:*

We are making shoes to measure and for our own store only at present. Hope to enlarge in the future.

J. T. MORRIS & CO.

### Will Build a Street Railroad.

ATLANTA, GA., May 11, 1887.

*Editor Manufacturers' Record:*

The stock for the Atlanta & Edgewood Street Car Line is all subscribed and the line will be built soon. The East Atlanta Land Company will be the main stockholder. This company has the finest plant here and will from time to time do much good for Atlanta.

JOEL HUNT.

### Will Build an Ice Factory.

SOUTH PITTSBURGH, TENN., May 14, 1887.

*Editor Manufacturers' Record:*

Mr. Wm. Bouron is organizing a company to build an ice factory in South Pittsburgh. He has associated with him Mr. F. P. Clute, city engineer, and they also contemplate the erection of a steam laundry.

G. C. P.

### Machinery Wanted.

BRISTOL, TENN., May 13, 1887.

*Editor Manufacturers' Record:*

It is my intention to start a broom factory on a small scale just as soon as I can get machinery and material. I want to buy a broom machine and want the name of some one in the business in New York or your city.

W. F. COLLIN.

HICKORY, N. C., May 14, 1887.

*Editor Manufacturers' Record:*

A stock company is being organized to erect a \$12,000 hotel here. The stock about all subscribed.

A. W. MARSHALL.

### New Machinery.

BRUNSWICK, GA., May 13, 1887.

*Editor Manufacturers' Record:*

We have bought a lot of new machinery of late for our sausage factory to complete our already good outfit in machinery line.

CHAS. BAUMGARTNER & BRO.

NASHVILLE, TENN., May 14, 1887.

*Editor Manufacturers' Record:*

Our double store, which we will build, will cost us \$25,000.

B. S. RHEA & SON.

### Enlarging Foundry.

MILNES, VA., May 14, 1887.

*Editor Manufacturers' Record:*

We are removing our foundry from Fox mountain and enlarging it.

SHENANDOAH IRON CO.

WM. MILNES, JR., Receiver.

### Will Add Machinery.

PRESCOTT, ARK., May 12, 1887.

*Editor Manufacturers' Record:*

The Prescott Lumber Co. was organized and incorporated May 3. Capital stock \$30,000. N. T. Richmond is president, and A. E. Stainton, vice-president. Will manufacture yellow pine exclusively. Making specialty of flooring, ceilings and finishing. Planing and saw mills now in operation. Will add moulding machinery and other planers and contemplate putting in 7 mile logging railroad during the summer, but have not yet purchased the necessary iron and rolling stock. Have an established trade in Kansas and Nebraska.

R.

### Water Works to be Built.

BEAUMONT, TEX., May 12, 1887.

*Editor Manufacturers' Record:*

There is a company organized here for the purpose of putting in water works. The company is composed of citizens of this place. Board of directors are: W. A. Fletcher, J. J. Critchton, V. Wiess, Henry Solinkey, John L. Keith and Dr. Z. T. Tuller. Charter received yesterday. Capital stock \$30,000.

B. F. CALHOUN, M. D.

ELLIJAY, GA., May 11, 1887.

*Editor Manufacturers' Record:*

I have bought wheat and corn mill machinery. I may want some other machinery in starting my wheat mill.

M. L. COX.

### Rebuilt Saw Mill and Sash Factory.

GALTS MILLS, VA., May 14, 1887.

My shops are rebuilt.

S. A. WRIGHT.

PITTSBORO, MISS., May 11, 1887.

*Editor Manufacturers' Record:*

At a recent meeting at Slate Springs \$4,000 were raised for the building of a cotton factory, which amount since has been raised to about \$12,000.

H. C. HORTON.

### A Cotton Mill Company.

RICHMOND, VA., May 13, 1887.

*Editor Manufacturers' Record:*

A bill is now pending in the Virginia legislature to charter the Roanoke Cotton Mills, at Roanoke, Va., with a capital of \$200,000. Mostly Philadelphia capital.

H. S. TROUT.

### To Build a Railroad.

ATHENS, GA., May 12, 1887.

*Editor Manufacturers' Record:*

I expect to build the railroad from Tallulah Falls, Ga., to Maryville, Tenn.

W. B. THOMAS.

### Electric Light Plant to be Erected.

TALLADEGA, ALA., May 16, 1887.

*Editor Manufacturers' Record:*

The electric light works will be established at an early day, but at present two companies are contending for a charter and operations will be delayed some days, though there is no doubt the works will be erected.

JNO. C. WILLIAMS.

### To Develop Marble Quarries.

FAYETTEVILLE, TENN., May 14, 1887.

*Editor Manufacturers' Record:*

A company called the Middle Tennessee Marble & Manufacturing Co., of which I am president, has been formed for the purpose of developing and operating valuable marble quarries near this place. The marble is of finest quality and variety, and inexhaustible in supply.

R. L. BRIGHT.

### Will Erect a Saw Mill.

LINCOLN, ALA., May 16, 1887.

*Editor Manufacturers' Record:*

We will put up a No. 4 saw mill during this week and may later on add other machinery.

WILLIAMS & HALEY.

ROME, GA., May 16, 1887.

*Editor Manufacturers' Record:*

A company formed and bought the Farmers' Friend Fence for the State of Georgia to manufacture and sell machines or fence or to sell county or individual rights. The company's stock is \$30,000. A charter applied for, and until the charter is granted, W. S. Crane, W. T. Smith, A. W. Walton, Martin Graham and Joe B. Patton are the trustees elected to manage the business of the company.

JOE B. PATTON.



**Information Wanted.**

SAVANNAH, GA., May 15, 1887.

*Editor Manufacturers' Record:*

Can you give me any information where we can get moulds for making stone vases. We want to manufacture vases, garden border, flower pots, &c.

THE PEIRCE PAT. STONE & BLDG. CO.  
JAMES S. PIERCE, Supt.

KNOXVILLE, TENN., May 11, 1887.

*Editor Manufacturers' Record:*

C. K. & W. R. R. is now being pushed and will be completed from here to N. C. line in two weeks, when the work will begin in earnest. I hope to be able to give positive information as to two or three other railroad projects soon. Our local company, Knoxville Real Estate Co., is building iron bridges, extending streets to and through large suburban tracts. We have bought here, and are now preparing to construct new street car lines from center of city through our properties; and also a belt railroad around the city, crossing and penetrating our various properties and connecting with all the railroads now entering and to enter the city, connecting with the river and all manufacturing establishments now in the city and that will locate here,—several of which are now negotiating for sites, and some large and important.

T. A. FRIERSON.

HOT SPRINGS, ARK., May 10, 1887.

*Editor Manufacturers' Record:*

The Little Hornet Mining Co. will be in full blast within the next 60 days; this company has 48 claims of as good property as can be found in the State. There is a new mining company just organized, and is known as the New York Co., and has several Eastern capitalists connected with it among the prominent ones. There has just been discovered a fine gold lead 25 miles west of here which promises to be the richest thing yet discovered. The excitement is at a fever heat; hundreds of people are daily scouting the woods, and securing all the available property. J. M. MCCALLUM.

BIRMINGHAM, ALA., May 12, 1887.

*Editor Manufacturers' Record:*

I will put in wood-working machinery in a few weeks. J. H. DUNNAVANT.

TALLADEGA, ALA., May 12, 1887.

*Editor Manufacturers' Record:*

Negotiations have been concluded between the Macon, Lagrange & Birmingham and the Birmingham, Georgia & Florida Railways for building a direct line from Birmingham via Talladega to Savannah, Ga., with branch to Brunswick Construction Co., organized with capital of \$1,000,000. This gives a direct line from Birmingham to seaboard 100 miles shorter than any existing line. HINTON A. HELPER.

AUGUSTA, GA., May 14, 1887.

*Editor Manufacturers' Record:*

We expect to make some improvement in our car repair shops.

GEORGIA CENTRAL R. R. & BANKING CO.,  
J. W. GREEN, Gen'l Man.

CHIPLEY, FLA., May 12, 1887.

*Editor Manufacturers' Record:*

J. Gould has bought lands near here for an industrial shool for Northern boys. The design is to give full instruction in the mechanical arts. R. W. MULLER.

**To Build a Woolen Mill.**

GRAHAMS FORGE, VA., May 16, 1887.

*Editor Manufacturers' Record:*

We have obtained charter of woolen mill and have the greater part of the stock taken, and will proceed in few days to organize the company, to be located at Wytheville, Va.

JOHN W. ROBINSON.

**Erecting Extract Works.**

DECATUR, ALA., May 11, 1887.

*Editor Manufacturers' Record:*

We are at work on our factory now, and, if we can get the lumber as fast as contract calls for, we will be in operation in about 5 months. Ours will probably be the largest single extract factory in the world, at least we know of none larger or even as large. Capacity will be about 75 barrels per day. We already have a contract for 40 barrels per day, with one party who has used our make of extract before. We are located on the bank of the Tennessee river, and will have water transportation to all parts of the world. AMERICAN OAK EXTRACT CO.,  
J. E. McCARTY, Vice-Pres. and Man.

**Erecting a Powder Factory.**

EL PASO, TEXAS, May 6, 1887.

*Editor Manufacturers' Record:*

The Union Powder Co. has been chartered under the laws of Texas, with capital stock of \$200,000, divided into 2,000 shares. J. J. E. Lindberg is president; Francis Parker, vice-president; L. H. Davis, secretary and treasurer, and Samuel L. Carter, superintendent. The directors are five in number. Most of the stock is taken and none for sale. The purposes of the corporation are to purchase all improved processes of manufacturing high explosives and to manufacture the same. It will begin manufacturing within 60 days, which is as soon as the materials can be brought. The blasting powder to be made a specialty is called Lamonias paroxide. Another kind, especial y for Mexico, is called Mexith. The factory is being erected just above El Paso.

L. H. DAVIS, Sec'y.

ANNISTON, ALA., May 10, 1887.

*Editor Manufacturers' Record:*

Col. John M. McKleroy, president of the Anniston City Land Co., has received drawings of a large number of residences from W. R. Grimshaw, a Minneapolis architect, ranging in price from \$400 to \$6,000, which will be put in the hands of contractors for bids at once. Work on the Anniston & Cincinnati Railroad is progressing rapidly; about 500 hands are at work. Contracts for all the bridges of this road has been awarded to the Atlanta Bridge & Axle Co. Some of the largest enterprises for Anniston yet are virtually settled; only await the signing of papers. \$400,000 was subscribed for one enterprise by the citizens of Anniston in a few hours time last week. 300 buildings by actual count are in course of erection in the city. W. D. SNOW.

**Calhoun as a Protectionist.**

The subscribers to the Birmingham Age, New Orleans Times-Democrat, Jacksonville News and a few other Southern papers have to get their democratic doctrines from the mouths of W. D. Kelley, alias pig iron, J. G. Blaine, John Sherman, McClure, Randall and other leading Republicans.—Pensacola Commercial.

The Commercial is mistaken. The Southern papers that favor a tariff so adjusted as to protect American industry get their democratic doctrine from John C. Calhoun, who advocated the protective tariff of 1816 as consitutional, and as promotive of the manufacturing and agricultural industries of the United States. The arguments of Calhoun at that day are applicable to the condition of the South at the present day. The war with Great Britain had just ceased and the feeble States were simply dependencies of the manufacturing establishments of Europe. Mr. Calhoun foresaw that to cut loose from such dependence, it was necessary to encourage home manufactures, and thus build up local markets for our agricultural products. This was before the cotton States came to the conclusion that slavery was a "political, social and moral blessing," and had founded their fortunes in cotton planting alone.

In after days when political power was measured by the question of slavery, Mr.

Calhoun looked upon a protective tariff as oppressive to the planter. But it is an undeniable historic fact that during the presidency of Monroe, when all the States felt as one and no sectional jealousy existed anywhere except, perhaps, in New England, the policy of a protective tariff, and that too of a tariff nearly if not quite prohibitory, commanded the unanimous support of the Southern States, the almost unanimous support of the Middle and Northern States, and that it encountered opposition only in New England, which feared that her shipping interest would suffer by such an embargo as the tariff of 1816.

It was Calhoun and the South who forced the protective tariff upon New England, against the stubborn protests of Daniel Webster and the almost unanimous opposition of that section. The indefatigable Yankee was equal to the emergency. He sold his ships and put his money into cotton factories. He made everything for the South, from a wooden clock to a church organ, from a fire-brick to a granite custom house.

When the slavery agitation arose it was natural that Calhoun and his followers would prefer to buy their wares from Europe than from the detested Yankee. Hence, having no factories of our own and desiring no manufactures with their foul smoke to soil the purity of our cotton fields, we felt no interest in protecting American handicraft. Satisfied that we could get the highest price abroad for our cotton and tobacco, we favored buying European goods at their lowest prices.

Now that slavery is gone, and the condition of labor at the South has undergone a complete change, we ask the Commercial in all candor whether the position of these Southern States at present, as respects the North, is not precisely the position occupied in 1816 by the United States toward Great Britain. If Calhoun were living now he would argue as he did in 1816, that a protective tariff may be resorted to by this government to protect its industries from foreign competition and to build up at home commercial centers at which our farmers may sell their products. He would point to Mobile and say that its people buy their dry goods from New York, and their food from Chicago, and that this city fears ruin unless the railroads discriminate in its favor against towns nearer centers of supply. He would lament that the life of Southern cities hangs upon such a slender thread. He would say as he said in 1816, that our iron and coal industries should be fostered by government discrimination against foreign competition until the South is able to adjust herself to the new condition of things, and can compete with the already-established industries of the North and East.—The Daily Register.

**THE OTIS TUBULAR FEED WATER Heater and Purifier**

Accomplishes more than is claimed for any OTHER HEATER.

WE GUARANTEE  
**ONE SQUARE FOOT**

HE OVER OF  
**Heating \* Surface**

Per Horse-Power

**SIMPLE.****Easily Cleaned.**

Thoroughly purifies the Water, separates and deposits the impurities and boils the Feed Water before it enters the Boiler.  
Send for descriptive circular and prices.



**Stewart Heater Co.,** BUFFALO, N. Y.

**ARTESIAN Well-Drilling Machine.**

The advertiser, owning a first-class Artesian Well-Drilling and Boring Machine, for depths from 300 to 3,000 feet, desires a party to take an interest in same and erect it in any good Southern or Western town, to bore for water, gas or oil. Party taking interest to manage the business, or if stock company is organized, owner will take stock. Address

**P. S. D. CO.**

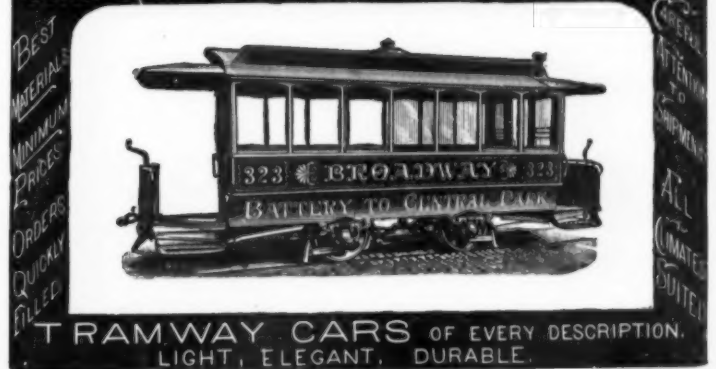
1207 Hamilton St., Philadelphia, Pa.

**FORT SCOTT, KANSAS.**

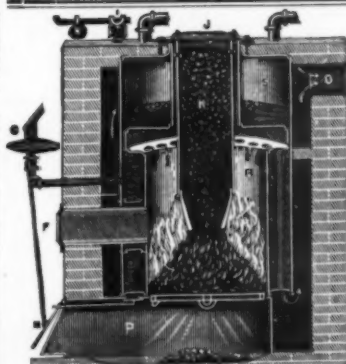
Attention of Capitalists and Manufacturers is called to the numerous advantages existing at Fort Scott, Kansas, which will soon make this city one of the most important manufacturing and commercial points in the West, and enable it to maintain its present supremacy over all other cities in this State. The natural facilities are unequalled. Coal of the best quality is sold at \$1.50 to 2.00 per ton; slack, 50 cents to \$1 per ton, delivered. Abundance of stone and brick, best quality. Natural gas is fully developed, and used for all purposes. Facilities for transportation and distribution are unequalled, being already the junction of five trunk railways. Direct communication with lumber regions of Mo. and Ark. Correspondence solicited.

SECRETARY BOARD OF TRADE.

**BERNHARD DIETZ**, Manufacturer of **Printers' Rollers**, and Roller Composition. Factory, cor. Light and Mercer streets, Baltimore. Prices: Composition, (bulk) 30 cents per lb.; for Casting, also, 30 cents per lb. Orders by Mail promptly attended to.

**JOHN STEPHENSON COMPANY LIMITED NEW YORK**

**TRAMWAY CARS** OF EVERY DESCRIPTION.  
LIGHT, ELEGANT, DURABLE.

**The DUNNING BOILER**

With Self-Feeding Coal Magazine

\* IS THE BEST FOR \*

**LOW PRESSURE STEAM HEATING**

And Insures a Warm House Day and Night.

**OVER 3,500 IN USE**

Keeps Steam up Constantly. Manufactured at the New York Central Iron Works, Geneva, N. Y. Send for Illustrated Catalogue with Full Description and Price List. Agents Wanted. N. B.—Correspondence Solicited from Architects and persons building.

# PITTSBURGH LOCOMOTIVE AND CAR WORKS,

PITTSBURGH, PA., Manufacturers of

**Locomotive Engines for Broad or Narrow Gauge Roads,**

From standard designs or according to specifications, to suit purchasers.

**TANKS, LOCOMOTIVES OR STATIONARY BOILERS FURNISHED AT SHORT NOTICE.**

A. STEWART, Pres't.

D. A. WIGHTMAN, Supt.

WILSON MILLER, Sec'y and Treas.



**BUFFALO HAMMER CO., Buffalo, N. Y., U. S. A.,** Manufacturers of a full line of  
**Solid Cast Steel Hammers, Sledges, Mauls,**



**RAILROAD TRACK TOOLS, &c.**

Every Hammer or Tool having our name is fully warranted. Catalogues and discounts sent on application.

## BAGNALL & LOUD BLOCK CO. BOSTON, MASS.

Largest Manufacturers of Tackle Blocks in the World.

Manufacturers of the Latest Improved Self-Adjusting ROLLER BUSHED and GENUINE METALINE BUSHED and Iron Bushed Rope and Iron Strapped

**TACKLE BLOCKS.**

CLASP OPEN.



Improved Self-Adjusting Roller Bushed Iron Sheave.

Send for the Celebrated  
**STAR BRAND.**



Improved Harcourt Patent Block.

Send for Catalogue  
No. 5.



Improved Self-Locking Link Snatch Block.

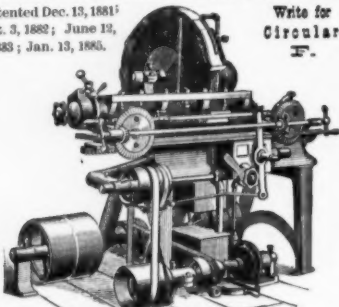
**Springfield Glue & Emery Wheel Co.**

Springfield, Mass.

**IMPROVED AUTOMATIC KNIFE GRINDERS.**

Patented Dec. 13, 1881;  
Oct. 3, 1882; June 12,  
1883; Jan. 13, 1886.

Write for  
Circular  
F.



It is the only Grinder run with water to prevent heating and drawing the temper. Once in motion requires no attention. Will ship on its merits for 30 days' trial, and if not satisfactory can be held subject to our order.

**Syracuse Twist Drill Co.**

SYRACUSE, N. Y.

**Cannon Chucking Reamers.**



These Reamers will remove more stock than any other. They only require a hole large enough to carry away the chips, as they will cut to the center, and make a perfect hole.

They keep their size better than any other. As they cut only upon the end, there is no tendency to wear below size.

They will not turn aside for hard or soft spots, nor for holes.

Send for Prices and Catalogue.

PEERLESS.



**The Gooch "Peerless"**  
And "Giant" Freezers.

OUR FREEZERS STAND UNRIVALED.

THE BEST GOODS EVER MADE.

Superior in Every Particular.

No other Freezers ever had such a sale. Send for Price-List and Discounts.

PRICES REDUCED FOR 1887

MANUFACTURED BY THE

**GOOCH FREEZER CO.**

28, 30, 32, 34, E. Ninth Street,  
36 and 38

CINCINNATI, O.



## Cleveland Machine Co.

**SUPERIOR  
OLID  
TEEL  
HEARS.**

FORGED  
FROM

**BAR STEEL**

AND  
TEMPERED  
IN

**OIL.**

WE CHALLENGE COMPETITION FOR

→ Cutting and Wearing Qualities. ←

THE FINEST. AS GOOD AS THE BEST.

**We Expect to Lead,** and you cannot afford to lose a chance of keeping posted on the IMPROVEMENTS of the age. Get our prices, and then try a sample order. Your customers will compel you to order again.

Address, with name of paper where you saw this,

**The CLEVELAND MACHINE CO., 143 to 161 Leonard St. CLEVELAND, O.**

**NIAGARA STAMPING & TOOL CO.**

— MANUFACTURERS OF —

**Tinners' Machines & Tools,**

— FOR WORKING SHEET METALS, &c. —

Frail Can Dies and Tools.

Canners' Outfits.



Squaring & Circle Shears, Presses, &c.

**Superior, Cor. of Randall St., Buffalo, N. Y.**

Write for our Catalogue and Price-List. Please mention this paper when writing.

**G. A. Crosby & Co.**

MANUFACTURERS OF

**Presses, Dies,**

AND

Special Machinery

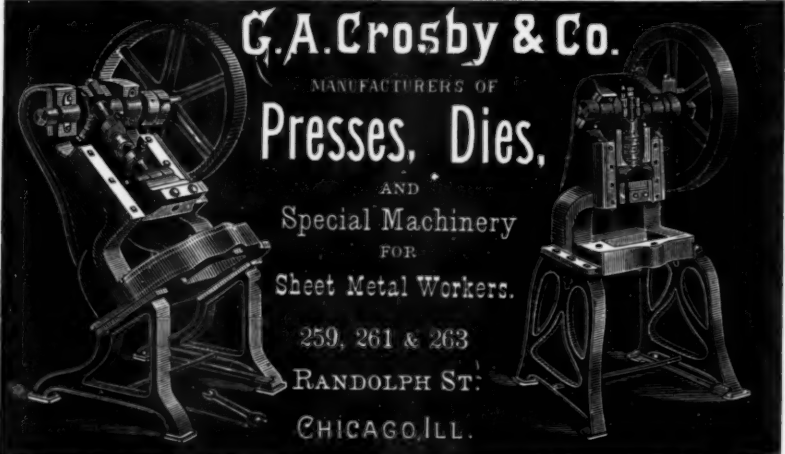
FOR

Sheet Metal Workers.

259, 261 & 263

RANDOLPH ST.

CHICAGO, ILL.













Bonney's.....	7	dor	\$10,	dis	50	¢
Stearns'.....	7	dor	\$9,	dis	20	¢
Ives'.....	No. 1, \$15; No. 2, \$12	7	dor,	dis	35	¢
Douglass'.....	7	dor	\$9,	dis	20	¢



**SILVER PLATED WARE.**  
Wm. Rogers Manf. Co. ....dis 50&10 %  
Holmes, Booth & Hayden.....dis 50&10 %  
Wallace's Steel Silver Plated.....dis 33&10 %  
Rogers Bros 1847.....dis 50&5 %  
C. Rogers & Bro.....dis 50&10 %

**SCREWS.**  
Standard new list, Feb. 15.  
Flat Head Bright.....70 %  
Round Head Bright.....65 %  
Flat Head Brass.....65 %  
Round Head Brass.....60 %  
Flat Head Blue (add 5 % to net).....70 %  
Brass and Silver Capped.....40 %  
Japanned Flat Head.....65 %  
Coach, Patent Gimlet Point.....dis 66 %  
Coach, Common or Lag.....dis 70 %  
Red.....dis 25 %  
Machine, Flat Head, Iron.....dis 50 %  
Machine, Round Head, Iron.....dis 50 %  
Bench, Iron.....dis 55&10 %  
Bench, Wood, Beach.....dis 25&10 %  
Bench, Wood, Hickory.....dis 25&10 %  
Hand, Wood.....dis 25&10 %  
Hand Rail, Sargent's.....dis 60&10 %  
Hand Rail, Humason, Beckley & Co.'s.....dis 40&10 %  
Hand Rail, Am. Screw Co., list Jan. 1, '81.....dis 70 %  
Jack (Wilson's).....dis 25 %

**SCREEN FRAMES AND PICTURES.**  
Standard Window Screens No. 1, 2 doz \$4; 3, \$5  
Door No. 5, \$15; dis 50&10 %  
Window Corner Irons, No. 3, doz. st's, \$2  
Door No. 6, " " \$3  
dis 50&10 %  
Door Latches, 3/4 dozen, \$3.60.....dis 30 %  
Porter's Patent Window and Door Screen Frames

**FINISH DOOR SETS.**  
In Im. Bl'k  
White. Walnut.  
No. 20.....\$2.75 \$3.25 %  
No. 21.....2.85 4.00 %  
No. 22.....5.50 6.75 %  
No. 23.....6.00 7.50 %  
No. 24.....9.00 11.00 %  
dis 33 1/3 %  
Porter's Corners—  
No. 0. Corners and Sticks complete for a  
three-foot window, 2 doz sets, \$4.00  
No. 1. Set for Window, 2 doz sets, \$4.00  
No. 1 1/2. " " 2 doz sets, \$4.00  
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No. 100. " " 2 doz sets, \$4.00

**SHOULDERS AND SCISSORS.**  
American (Cast) Iron.....dis 70&10 %  
Pruning.....see Pruning Hooks and Shears  
Barnard's Lamp Trimmers.....dis 4.00  
Tinners.....dis 30 %  
Massachusetts.....dis 50&10 %  
Seymour's.....dis 60&10 %  
Jersey Shears.....dis 80 %  
J. Wiss & Son, Nickel, 50&5 %; Japanned, 60&10 %

**SHOULDERS.**  
Sliding Door, M. W. & Co., list.....dis 45&2 %  
Sliding Door, R. & E. list.....dis 60&2 %  
Sliding Door, Patent Roller.....dis 60&10&2 %  
Sliding Door, Pt. Roller, Hatfield's.....dis 60&10&2 %  
Sliding Door, Russell's Anti-Friction.....dis 60&10&2 %  
Also see Hangers.

**SHOVELS AND SPADES.**  
Ames, New List, November 1 1885.....dis 20 %  
Griffiths.....dis 50&5 %  
Remington's (Lowman's Patent).....dis 30 %  
Rowland's.....dis 60 %  
Lippincott, new list.....dis 25 %  
Humy, Bins & Co.....dis 25 %

**SILVER PLATED HOLLOW WARE.**  
Wm. Rogers Manf. Co.....dis 50 %  
Meriden Britannia Co.....dis 40 %

**SOLDERING IRONS AND COPPERS.**  
Covert's Soldering Irons.....dis 35 %  
Covert's Adjustable Coppers.....dis 35 %

**SPOONS.**  
Britannia.....dis 60, 10&10 %  
Tinned, Iron, Table and Tea.....dis 65 %  
Tinned Iron Basting.....dis 30 %  
German Silver.....dis 40&5 %

**STONE.**  
Hindostan No. 1, 4c; Axe, 5c.....net  
Sand Stone.....dis 60&10 %  
Washita Stone.....No. 1, 1 lb, 22c. net.  
Washita Stone, Slips.....No. 1, 1 lb, 45c. net.  
Arkansas.....\$1.50 1 lb, net

**SQUARES.**  
Steel.....dis 60&10 %; full cases, dis 70&10 %  
Iron.....dis 60&10 %; full cases, dis 70&10 %  
Nickel Plated.....add \$2.50&4 %  
Try Square and T Bevels.....dis 50&10 %  
Chester's Try Square and T Bevels.....dis 40 %

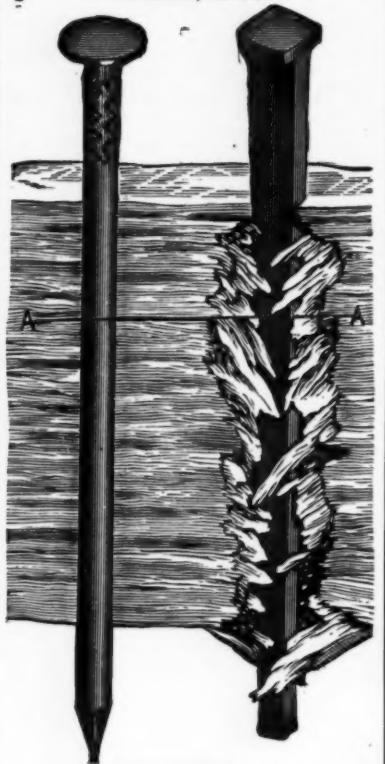
**TACKS, BRADS, & C.**  
American Iron Carpet Tacks, all kinds.....70 %  
Steel Carpet Tacks, all kinds.....70 %  
Swedes Iron Carpet Tacks, all kinds.....70 %  
Swedes Iron Tacks.....67 1/2 %  
Swedes Iron Upholsterers' Tacks.....67 1/2 %  
Tinned Swedes Iron Tacks.....67 1/2 %  
Tinned Swedes Iron Upholsterers' Tacks.....67 1/2 %  
American Iron Cut Tacks.....67 1/2 %  
Gimp and Lace Tacks.....67 1/2 %  
Tinned Gimp and Lace Tacks.....67 1/2 %  
Copper Tacks.....50 %  
Copper Finishing and Trunk Nails.....50 %  
Cigar Box Nails.....45 %  
Finishing Nails.....60 %  
Trunk and Clout Nails.....60 %  
Tinned Trunk and Clout Nails.....60 %  
Basket Nails.....60 %  
Chair Nails.....60 %  
Zinc Glaciers' Points.....45 %  
Common and Patent Brads.....60 %  
Hungarian Nails and Miners' Tacks.....60 %  
Tinned Capped Trunk Nails.....50 %  
Looking Glass Tacks.....40 %  
Picture Frame Points.....40 %  
Leathered Carpet Tacks.....40 %  
Brush Tacks.....40 %

**TAP BORERS.**  
Common and Ring.....dis 20 %  
Ives' Tap Borers.....dis 15&10 %  
Enterprise Mfg. Co.....dis 25 %

**TOBACCO CUTTERS.**  
Enterprise Mfg. Co (Champion).....dis 20&10 %  
Wood Bottom.....dis 15&10 %  
All Iron.....dis 20 %  
Wilson's.....dis 50 %

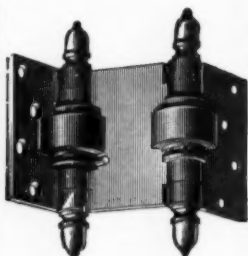
## The Salem Wire Nail Co.

SALEM, OHIO.



## Wire and Wire Nails

HEADQUARTERS FOR PENNY WIRE NAILS.



**UNION SPRING HINGES**  
are simple, easily set,  
and cannot be put on wrong. They work  
smoothly and are of the best material.  
Light doors they hang on equal with  
heavy doors. Write for circular and  
price list. M. W. ROBINSON, Sole Agent,  
19 Chambers St., New York.

## \$250 WILL BUY



**THE BEST SAW MILL**  
Yet offered for the money.  
SEND FOR CIRCULAR.  
RICHMOND MACHINE WORKS,  
RICHMOND, INDIANA.



**AUTOMATIC CUT OFF ENGINES**  
Embodying a new system of  
Absolute Regulation  
against a change of  
load and boiler pressure.  
The most perfect govern-  
ing ever obtained. Send  
for circular. We guarantee better regulation than is  
possible for any other engine to give.  
BELL ENGINE CO., ERIE, PA.

**Hardware and Gun Trade: Quote our**  
**\$5 Clay Pigeon Trap.**  
Electrotypes furnished gratis for catalogues.  
Liberal commissions. 80-page book free. Address  
LIGOWSKY CLAY PIGEON CO., Cincinnati, O.

**TO READERS OF ADVERTISEMENTS.**  
Readers of the MANUFACTURERS' RECORD who order  
any goods herein advertised, or  
ask for information concerning  
them, will oblige the publishers  
by stating that they saw the  
announcement in the columns of  
this paper.

**STEARN'S**  
**BENCH DRILL**  
LOW IN PRICE.  
HIGH IN FINISH.  
24 inches high. Run of  
Screw, 3/4 inches. Bear-  
ings carefully finish-  
ed with stand-  
ard reamers. All  
parts interchang-  
able. Extension crank for  
large drilling. Chuck holds 3/4  
round or tapered square drill  
bit.  
FOR SALE BY THE TRADE  
ON  
**EC STEARN'S & CO.**  
SYRACUSE, N.Y.

**PROTECT YOUR INTERESTS!**  
BUY THE IMPROVED  
**"STANDARD"**  
**WATCHMAN'S CLOCK.**

Recommended by Fire Insurance Companies, to con-  
trol Watchmen in Factories, Warehouses, etc., etc.  
The only reliable instrument of its kind and war-  
ranted superior to all others. Will be sent on trial.  
Price for Twelve Stations Complete, \$50.  
It will pay you to send for circular before ordering  
elsewhere.  
**O. E. HAUSBURG.**  
Sole Agent, 71 Nassau St., New York.  
N. B.—All kinds of Watchman's Clocks repaired  
and warranted to give satisfaction.

## CHAMPION IRON FENCE CO.

KENTON, OHIO.

Largest Iron Fence and Railing Works in U. S.



**SPECIALTIES**—Iron Stairs and Jail Work,  
Builders' and Ornamental Iron Work, and the only  
manufacturers of Malleable Iron Casting, guaranteed  
against breakage; also manufacturers of the Celebra-  
ted Ohio Champion Iron Fence and Lift Pumps.  
Send for 150-page Catalogue.



**THE WOODRUFF'S PATENT CELEBRATED**  
**AMERICAN SUSPENDING EAVE TROUGH**  
**HANGER.** The best in the world. Manufactured  
by GEO. W. HEARTLEY, 303 St. Clair St., Toledo,  
Ohio. Send for prices.

## SILVER & DEMING

MFG. CO.

Salem, Ohio.

Manufacturers of

Cistern, Well and Force

Pumps. Iron and Brass

Cylinders. Wind Mill

Pump & Supplies. Hand

and Power Rotary

Pumps. Boiler Feed

Pumps.

Hydraulic Rams,

Garden Engines, &c.

Well Drillers' and

Well Drivers' Sup-

plies. Catalogue of

Pumps for

Farm and

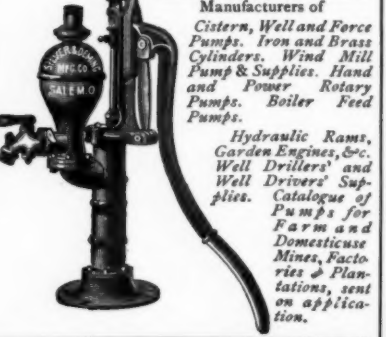
Domestic Use.

Factories, &c.

Plans, &c.

sent on applica-

tion.



**FOOT POWER**  
**S'ROLL S'AWS!**  
CIRCULAR SAWS,  
LATHES, MOTORS, &c.,  
FOR WORKSHOP USE.  
Sold on Trial, if desired  
New Catalogue Free.  
**SENECA FALLS MFG. CO.**  
642 Water Street,  
SENECA FALLS, N. Y.

**CLARK'S**  
**Drying, Ventilating**  
**AND**  
**EXHAUST FANS.**  
Strong, Light Running, Effective.  
Satisfaction guaranteed. Catalogue Free.  
**GEO. P. CLARK,**  
Box U. Windsor Locks, Conn.

**THERMOMETERS.**  
Tin Case.....dis 75&10 %  
Therm. Glasses.....dis 25&10 %

**TON CALS.**  
Winsted.....dis 25 %

**TRAPS.**  
Game, Newhouse.....dis 35 %  
Game, Oneida Pattern.....dis 60&10 %  
Game, Blake's Patent.....dis 40&10 %  
Mouse, Wood, Choker.....dis 10 %  
Mouse, Round Wire.....dis 10 %  
Mouse, Wire.....dis 10 %  
Mouse, Catch-em-alive.....dis 10 %  
Cyclon Mouse.....dis 60 cts.  
Ideal Mouse.....dis 10 %  
Rat, "Decoy".....dis 10 %  
Delusion Mouse, per doz.....dis 10 %  
Ideal.....dis 10 %

**TRAWLS.**  
Lothrop's Brick and Plastering.....dis 30 %  
Reed's Brick and Plastering.....dis 15 %  
Disston's Brick and Plastering.....dis 20&10 %  
Clement & Maynard's.....dis 20 %  
Worrall's Brick.....dis 20 %  
Bradley & Walby's.....dis 20 %  
Garden.....dis 25 %  
Rose's Brick.....dis 15 %

**TRUCKS (WAREHOUSE, &c.)**  
Handy Truck.....dis 50 net  
Penfield Block Co.'s list, 1889.....dis 35 %  
Peerless, with Cogs, No. 3.....dis 50 %  
Peerless, with Cogs, No. 4.....dis 60 %  
Eureka, No. 2.....dis 40 %

**VISES.**  
Cheney's Combined Vise and Anvil.....dis 30 %  
Solid Box—Wilson's.....dis 50&10 %  
Trenton.....dis 40&5 %  
Iron City Tool Works.....dis 50&10 %

**MANNEUR DRILL MFG. CO'S—**  
Machinist's Vise.....dis 50 %  
Bench—Wilson's.....dis 45 %  
Trenton.....dis 25 %  
Parker's.....dis 25 %  
Prentiss's.....dis 25 %  
Bonney's.....dis 35 %  
Wall Wheels.....dis 60&10 %  
Stephen's Patent Vises.....dis 15 %

**WIRE.**  
Brass and Copper, list of Jan. 17, 1884.....dis 25 %  
Bright and Annealed.....dis 25 %  
Bright and Annealed.....dis 25 %  
Bright and Annealed.....dis 25 %  
Coppered.....dis 25 %  
Galvanized, Nos. 0 to 18.....Market list dis 40 %  
Tinned, Nos. 0 to 18.....dis 60 %  
Tinned Broom Wire, Nos. 18 to 25.....dis 60 %  
Annealed Fence, Nos. 8&9.....dis 65 %  
Annealed Grape, Nos. 10 to 14.....dis 65 %  
Fence Staples, Galvanized.....dis 50 %  
Japanned Barb Fence.....dis 40 %  
Galvanized Barb Fence.....dis 50 %  
Buck Thorn Galvanized.....dis 50 %  
Picture Wire.....dis 60 %  
Clothes Line Wire, Galvanized.....dis 75 %  
Wire Cloth, green, drab and black.....dis 75 %

**WIRE NAILS.**  
Standard Penny Nails.....dis 75 Base.  
Wire Nails List, April 13, 1886.....dis 50&10 %

**WRENCHES.**  
American Adjustable.....dis 45 %  
Baxter's Adjustable "S" list Jan. 1880.....dis 35 %  
Baxter's Diagonal.....dis 40 %  
Coe's Genuine.....dis 60 %  
Coe's "Mechanics".....dis 60&10 %  
Coe's Pattern, Malleable.....dis 50&10 %  
Coe's Pattern, Wrought.....dis 50&10 %  
Girard Standard.....dis 70&10 %  
Girard Agl.....dis 80 %  
Always Ready.....dis 90 %  
Collins' Wrenches.....dis 50, 10&5 %

**WRINGERS.**  
Universal, XX, No. 2 1/2.....30.00  
Universal, XX, No. 3.....30.00  
Universal, XX, No. 4.....30.00  
Universal, XX, No. 5.....30.00  
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Universal, XX, No. 100.....30.00

**MISCELLANEOUS.**  
"Diamond" Vegetable Grater.....dis 10 %  
Rotary Knife Potato Parer.....dis 10 %  
Metallic Shingles.....dis 10 %  
Hopper Cherry Seeders.....dis 10 %  
NEW SCOTT MANFG. CO'S  
Rotary Peach Parer.....dis 10 %  
Gold Medal Apple Parer.....dis 10 %  
Orion Apple Parer, Corer & Slicer.....dis 10 %  
Victor.....dis 10 %  
Improved Hopper Cherry Seeders.....dis 10 %

**\$250 SINGLE. \$350 DOUBLE.**  
With Saw and Tools.  
Top Saw Frame can be  
added to Single Mill  
when desired. Capacity,  
3,000 to 5,000 per  
day with 3 men. 16 to  
18 horse portable engine will  
drive it. Agents wanted. Send for description  
and terms.  
**ROCKWOOD, NEWCOMB & CO.**  
180 to 190 S. Pennsylvania St., Indianapolis, Ind.

**The Centennial Water Cut-Off,**  
**FOR CISTERNS.**  
It is the only Cut-Off that can  
be used in any position without  
extra pipe. Try them and you  
will use no other. For sale by the  
trade. Ask your jobber  
for them.

**W. P. MYER**  
MANUFACTURER,  
25 and 27 E. South St.,  
INDIANAPOLIS, IND.

8-inch sample, by mail  
50 cts. in stamps.

The following houses are special agents, who will  
furnish this Cut-Off at manufacturers' prices: G. H.  
MOSEMAN & CO., New York City; F. H. LAW-  
SON & CO., Cincinnati, Ohio; HASLET, FLAN-  
GEN & CO., Philadelphia, Pa.; L. F. HOFFMAN,  
San Antonio, Tex.; TROY STAMPING WORKS,  
Troy, N. Y.

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MOSEMAN & CO., New York City; F. H. LAW-  
SON & CO., Cincinnati, Ohio; HASLET, FLAN-  
GEN &



# THE

# Hercules Water Wheel

## IN THE SOUTH.

### WHAT SOUTHERN USERS SAY OF THE HERCULES.

There is probably no higher authority in the South on water wheels than Mr. John Hill, civil and mechanical engineer, of the great Eagle & Phenix Cotton Mills, at Columbus, Ga. Read what he says of the Hercules Wheel.

#### The Best Wheel We Have.

JOHN HILL, CIVIL AND MECHANICAL ENGINEER,  
Reference—Eagle & Phenix Mfg. Co.

COLUMBUS, GA., April 30, 1887.

As to my opinion of the Hercules Wheel, will say: In our mill (the Eagle & Phenix) we have twenty-one (21) water wheels of various kinds, three of them being Hercules. I regard the Hercules as being by far the best wheel of any we have. It is the best in workmanship, absence from repairs, large per cent. in power, and in general satisfactory results. I know of no wheel its equal. At Holyoke, testing flume a few weeks since. I personally witnessed a test of a Hercules of the ordinary construction, which gave 83 96-100 per cent. of efficiency.

Yours truly,

JOHN HILL.

Cannot Speak too Highly of the Hercules Wheel.

JAMES RIDDLE, SON & CO.  
Brandywine Cotton Mills.

KENTMERE, DEL., April 27, 1887.

In reply to your inquiry as to the working of a "Hercules Water Wheel" now running at our mills, would say that we put in nearly two years ago a 39-inch Hercules Wheel, running under a 14-foot head. It is driving up to full regular speed three hundred and three heavy looms, with only half gate. We are about to enlarge the weave mill and add three hundred more looms, which will be driven by the same wheel. We cannot speak too highly of the Hercules. It has absolutely run without cost or derangement since it started, and has given eminent satisfaction in every way.

Yours truly,

JAMES RIDDLE, SON & CO.

Perfectly Satisfactory in Every Way.

PORTER WOOLEN MILL.

J. H. Porter, President. J. W. Robertson, Gen. Manager.

CLARKSVILLE, GA., April 20, 1887.

In reply to enquiry as to my opinion of the Hercules Turbine Water Wheel, say: I have put in two, one about

six years since, and the other in 1883, and think so highly of the wheel that I shall use another in cotton mill this company is now constructing. Neither of the wheels alluded to have given the slightest trouble, and their working has been perfectly satisfactory in every way.

Yours truly,

J. W. ROBERTSON, Gen. Man.

The Hercules Wheels Have Given Perfect Satisfaction.

ROSSELL MANUFACTURING CO.

Sheetings, Shirtings, Checks, Yarns, &c.

ROSSELL, COBB COUNTY, GA., April 29, 1887.

In answer to yours of 25th inst., asking our opinion of the Hercules Wheel, will say our experience is as follows: In our new mill, built about four (4) years ago, we put a 30-inch Hercules Wheel, under a 21-foot head of water. It has given such satisfaction running this (5,000) five thousand spindle mill, that last summer, when we were compelled to put in a new wheel at our old mill, running 7,000 spindles, looms, twisters, &c., we put in a 36-inch Hercules Wheel, under a 27-foot head of water. All I can say is we have surplus power in both mills, have lost no time by any defect of wheels, and if we were putting up any more mills, would use the Hercules Wheel. They have given us perfect satisfaction.

Yours respectfully,

F. J. MINHINETT, Prest.

A Good Wheel, and Has Given Good Satisfaction.

PEE DEE MANUFACTURING CO.

Plaids and Warps.

ROCKINGHAM, N. C., April 30, 1887.

We have been using the Hercules Water Wheel for more than six years. Our superintendent says it is a good wheel, has given good satisfaction, and its performance is equal to the claims of the maker. We have a head of 17 feet. Our wheel has a diameter of 39 inches. Under this water pressure the wheel has moved 4,000 spindles and the needed preparation, and 164 plaid looms. The above includes the dye house, machine shop and all other machinery which we employ.

Very respectfully,

WALTER L. STEELE, Prest.

Best Wheels I Have Ever Seen.

MARIETTA PAPER MANUFACTURING CO.

Book, News and Wrapping Papers.

MARIETTA, GA., April 30, 1887.

In reply to your favor of the 25th inst.: I am using four Hercules Water Wheels, two 12-inch, one 24 inch,

and one 30-inch. They have given me perfect satisfaction, and I think that they are the best wheels that I have ever seen.

Yours truly,

S. A. ANDERSON.

Has Never Given the Slightest Trouble.

PACOLET MANUFACTURING CO.

Jno. H. Montgomery, Prest. and Treas.

PACOLET, S. C., April 29, 1887.

Replying to yours of 25th, would say: We have a 54-inch Hercules Water Wheel running, under 20 foot head, 12,000 spindles and 328 looms, with other necessary machinery. Has been running about three and a-half years, and has never given us the slightest trouble; not an hour's stoppage during the whole time.

Very truly yours,

JNO. H. MONTGOMERY, Pres. and Treas.

Well Satisfied With It.

WM. J. RUSSELL,

Manager Princeton Factory.

ATHENS, GA., April 28, 1887.

I have used the "Hercules" wheel since 1881, and am so well satisfied with it that I should not purchase any other if in want of a first-class wheel. It does all the manufacturers claim for it.

Yours truly,

WM. J. RUSSELL, Manager.

Has Given Entire Satisfaction.

HOLCUMB'S ROCK, BEDFORD CO., VA.,

April 28, 1887.

The Hercules Wheel has given entire satisfaction.

Very respectfully,

J. A. HARRIS & CO.

Unhesitatingly Say its the BOSS Wheel.

BUZELA, GA., April 29, 1887.

I have been using a 21-inch "Hercules Water Wheel" since August 1880, and unhesitatingly say it is the BOSS wheel. It has performed with utmost satisfaction, and given more power than the makers claim, using water with more economy than any wheel I ever knew. T. W. G. Inglett, Esq., who has put up two "Hercules" for parties, says "it can't be beat."

Very respectfully,

BRAD. MERRY.

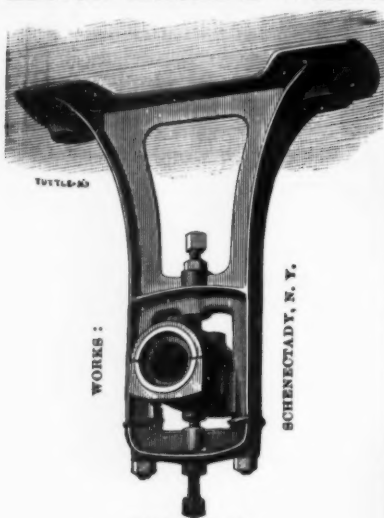
## THE HERCULES

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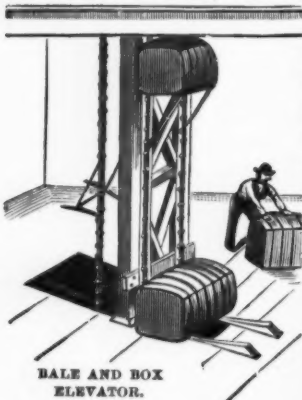
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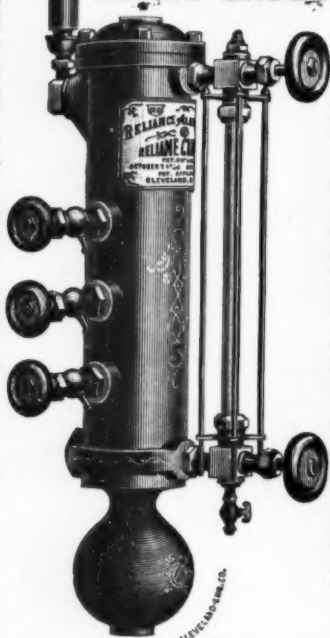


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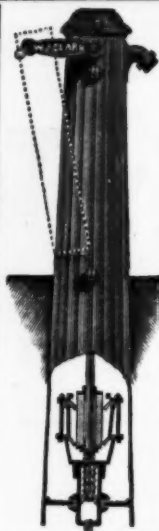
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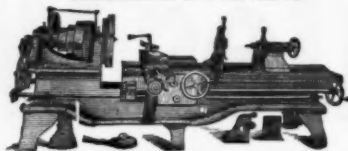
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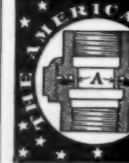
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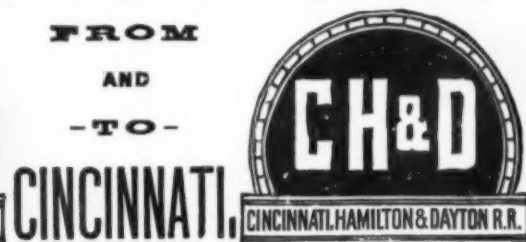
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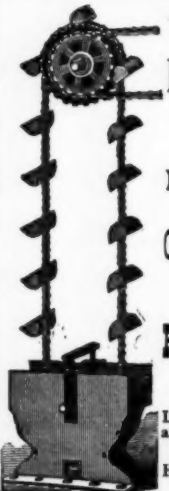
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Subscription Books for the Capital Stock of this Company are now open

At the Offices of the Company, Brunswick, Ga., and at (Room 20) 229 Broadway, N. Y.; (Room 4) 85 Devonshire Street, Boston, Mass., and other Branch Offices of the Company until the 1st day of August, 1887.

The Company is formed under and by virtue of a Charter granted June 19, 1886, to ANDREW J. ROGERS, JAMES M. OLMSTEAD, HENRY S. WELLES, DANIEL W. CLARK, GEORGE E. SMITH, JOHN E. SAUNDERS, and FREDERICK G. BRUNEL, and their associates, in accordance with the Laws of the State of Georgia, to run for twenty years, with the right of renewal, and authorizing a Capital Stock of \$100,000, in shares of \$50 each, with power to increase the same at any time to any amount not exceeding \$10,000,000, payable in either money, or real or personal property that may be utilized in the business of the Company. The Charter is, by comity of the States, made operative throughout the entire country.

## THE PRELIMINARY ORGANIZATION

Has been duly effected by electing the following named

### OFFICERS.

ANDREW J. ROGERS, Prest. JAMES M. OLMSTEAD, Vice-Prest. GEO. E. SMITH, Sec. FRED'K G. BRUNEL, Treas.

### DIRECTORS.

A. J. ROGERS, Brunswick, Ga., and 227 W. 10th St., New York. FREDERIC G. BRUNEL, Grand Union Hotel, New York.  
JAMES M. OLMSTEAD, 85 Devonshire St., Boston, Mass. JOHN E. SAUNDERS, Nashville, Tennessee.  
HENRY S. WELLES, 229 Broadway, New York. DANIEL W. CLARK, 11 Winthrop Street, Hartford, Conn.  
GEORGE E. SMITH, 32 Broadway, New York. WILLIAM B. BURROUGHS, Brunswick, Ga.

### EXECUTIVE COMMITTEE.

ANDREW J. ROGERS, HENRY S. WELLES, FREDERICK G. BRUNEL, WILLIAM B. BURROUGHS.

The said Officers and Directors to hold over until the First Meeting of the Stockholders.

## INCREASE OF THE CAPITAL STOCK.

In order to promptly acquire ample areas of Land and Harbor Water frontage, for colonization, wharfing and other purposes, as well as obtaining sufficient funds for carrying out the several objects of the Company, the Directors have duly voted an increase of the Capital Stock from \$100,000 to \$3,000,000, payable in either money or in any real or personal property that may be utilized in the business of the Company, (as provided in the charter,) and have authorized the opening of Subscription Books for said \$3,000,000 of Capital Stock.

## EUROPEAN CO-OPERATION.

The President of the Company has perfected arrangements with competent European parties whereby they agree to subscribe, or cause to be subscribed, two-thirds of said \$3,000,000 of Capital Stock, provided the other one-third of said Stock is duly subscribed in America, and to pay in \$200,000 for every \$100,000 thereof that shall have been so subscribed in America and paid into the treasury of the Company.

## TRANS-ATLANTIC STEAMSHIP LINE.

The President of the Company has also arranged with competent European ship owners for promptly putting on and maintaining a Trans-Atlantic Steamship Line between the port of Brunswick, Ga., and ports in the United Kingdom; said line to comprise a fleet capable of doing all the trans Atlantic shipping business of the Company, and to be put on as soon as the Company announces itself ready with freights, etc., for trans-Atlantic shipment.

## THE GENERAL ENTERPRISE

Comprises the building up and maintaining an extensive domestic and foreign trade at and through the city and port of Brunswick, Ga., and corresponding ports, and engaging in a general system of Lands Improvement, particularly including the building up, extending and beautifying the city and suburbs, and improving and perfecting the Harbor of Brunswick for maritime commerce, and generally aiding in developing the agricultural, mineral and other natural resources of, and settling the surrounding districts and corresponding sections of the interior, with the view to participating in the general benefits and increase in value of properties accruing from such developments and improvements, and to inaugurate and conduct

## BUREAUS OF COLONIZATION AND INDUSTRY

As special departments of the General enterprise for commercially engaging in such systems of Colonization and Co operative Industries as will, from time to time, aid in relieving the Labor Markets of all surplus artisans and other workers, including the worthy, able bodied indigent classes, by drawing them off and settling or aiding them in settling and getting fairly started on alternate lots of the Company's Lands, in suitable rural and growing village districts, or so employing or aiding them to find such suitable employment as will make them reciprocally useful to the Company and ensure their becoming self-sustaining and prosperous constituents of the commonwealth, and finally reimbursing the Company with fair profits for all such assistance, thus materially aiding in freeing society of its worthy, able-bodied, destitute and suffering industrious classes by reclaiming them from all anarchical tendencies, and thence through their own prosperity readjusting them as good, law-abiding and patriotic citizens of the Commonwealth.

## THE COMMERCIAL DEPARTMENT.

With the foregoing objects in view, the Company will engage in the following enterprises, taking them up and carrying them forward in such business order as will ensure the prosperity of every department of the General Undertakings, beginning with The Commercial Department proper, it being the only medium through which the more benevolent and humane purposes can be successfully carried into effect with profit to the Company. The Directors are already assured of a large paying business from the commencement of active operations in the following specified enterprises, in which the Company will be constantly turning over its funds and realizing from 5 per cent. upwards of net profits every sixty or ninety days. Viz: A General

The Stock of the Company will be Receivable at Par in Payment for Lands purchased from the Company.

**ANDREW J. ROGERS, Prest. B. L. I. & C. Co.**  
229 BROADWAY, (Room 20,) NEW YORK.

## TRANS-ATLANTIC AND COASTWISE SHIPPING BUSINESS,

Including storing, wharfing and forwarding at and through said port and corresponding ports, and the sending of goods and other valuables through in bond or by through bills of lading to and from any and all points; the advancing of money on bills of lading and on goods and other property in store; and acting as merchants and general agents, and doing a banking and general commission business. In these departments alone the Company will find constant, active, safe and profitable employment for a considerable amount of its capital, thereby ensuring fair dividends from the start.

## OTHER SOURCES OF REVENUE.

By judicious purchases, both in respect to price and locality of lands, as well as the suitability of the climate, and thence properly settling immigrants on alternate lots thereof, carefully reserving every alternate farm or section for sale later on, the Company could reasonably expect to realize from 10 to 25 per cent. net on sales of the first alternate farms or other lots, and thence, in future further realizing from 100 to 500 per cent. and upwards from the ultimate sales of the reserved building lots, farms or sections. This plan carried out on a commensurate scale would of itself, without risk of the capital invested, enrich any well-managed company.

## GENERAL LANDS IMPROVEMENT DEPARTMENT.

To buy, own and sell lands and deal in real estate and leaseholds generally, and to engage in a general system of Lands Improvement, particularly including the building up, extending and beautifying the City of Brunswick and Suburban districts, and generally developing and settling the surrounding country; the establishing and settling colonies in the interiors of the various States, and parts of States, wherein immigrant settlers and other industrial classes are needed; laying out and building up villages, towns, and cities; making roads, streets and all necessary and profitable improvements; aiding in the fuller development of the vast agricultural, mineral and other.

## NATURAL RESOURCES OF THE SOUTH,

Southwest and corresponding sections; the breeding and rearing of horses, mules, cattle and live stock generally, for home and foreign markets; the laying out, improving, stocking and working farms of all kinds; developing water powers for manufacturing, milling and other purposes; opening and working coal, iron and other mines, and marble and stone quarries, with a view to making money by profitably employing the idle, and making homes and livings for the worthy, able-bodied indigent classes, as well as making the several properties productive and generally enhancing the values thereof and making them more saleable. In fact, the company offers

## SAFE AND PROFITABLE INVESTMENTS

In every department of the General Enterprise, basing the stability of the entire Capital Stock not only upon the General Business of the Company but upon real estate carefully chosen for its intrinsic worth, its suitability for the purposes of the Company and its improvable qualities and possible continual enhancement in value from direct and surrounding improvements.

For a fuller statement of the PURPOSES and PLANS of the Company, see the Charter and Prospectuses, Documents Nos. 1, 2 and 3 of the Company's pamphlets, which can be obtained at the Offices of the Agents, or from any of the Officers of the Company.

## FORMS OF APPLICATION

For Stock on the part of those who may desire to subscribe to the Capital Stock, but are unable to reach the Agent or Officer in charge of the Subscription Books, will, on application in writing to such Agent or Officer, or to the President of the Company, be forwarded, together with the necessary instructions for securing the number of Shares such Applicant may desire or that may be allotted to him or her.

## PROPOSALS FOR TRANSFERRING LANDS

Or other available property in exchange for Stock in the Company will be entertained, and the suitability, quality and value of the property and titles thereto will be duly examined by proper experts in the interest of the Company; but all such proposals must be submitted in writing to an Agent or Officer, or to the President of the Company on or before the 1st day of August next, and must be accompanied with a full description, giving all particulars, including the situation and value of such property.



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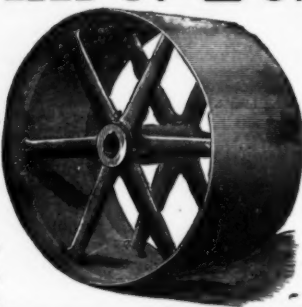
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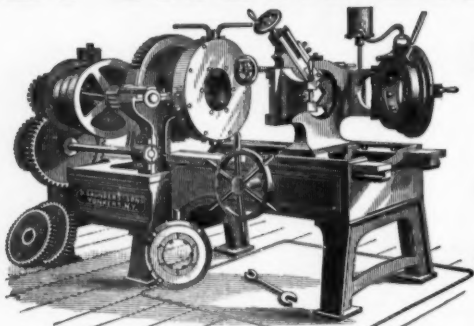
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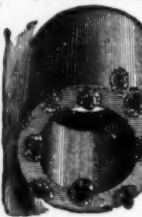
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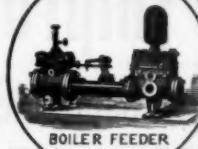
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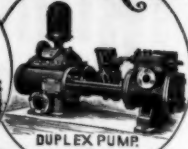
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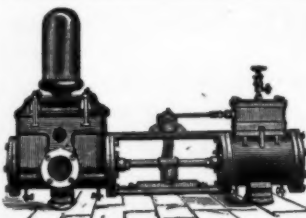
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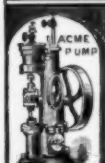
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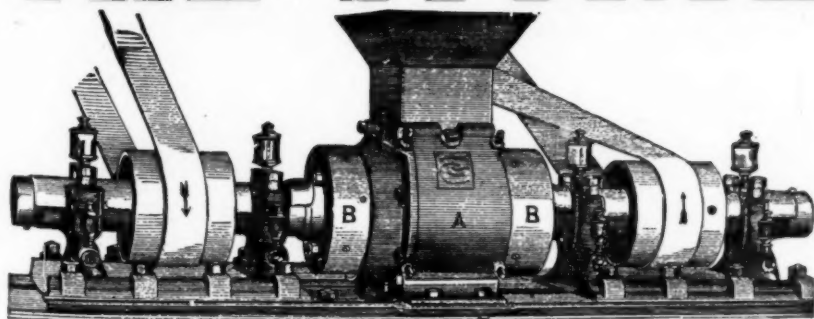
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